

FEDERAL OPERATING PERMIT

A FEDERAL OPERATING PERMIT IS HEREBY ISSUED TO
Kinder Morgan Crude & Condensate LLC

AUTHORIZING THE OPERATION OF
Galena Park Terminal
Crude Condensate Splitter
Special Warehousing and Storage

LOCATED AT
Harris County, Texas
Latitude 29° 43' 58" Longitude 95° 13' 13"
Regulated Entity Number: RN100237452

This permit is issued in accordance with and subject to the Texas Clean Air Act (TCAA), Chapter 382 of the Texas Health and Safety Code and Title 30 Texas Administrative Code Chapter 122 (30 TAC Chapter 122), Federal Operating Permits. Under 30 TAC Chapter 122, this permit constitutes the permit holder's authority to operate the site and emission units listed in this permit. Operations of the site and emission units listed in this permit are subject to all additional rules or amended rules and orders of the Commission pursuant to the TCAA.

This permit does not relieve the permit holder from the responsibility of obtaining New Source Review authorization for new, modified, or existing facilities in accordance with 30 TAC Chapter 116, Control of Air Pollution by Permits for New Construction or Modification.

The site and emission units authorized by this permit shall be operated in accordance with 30 TAC Chapter 122, the general terms and conditions, special terms and conditions, and attachments contained herein.

This permit shall expire five years from the date of issuance. The renewal requirements specified in 30 TAC § 122.241 must be satisfied in order to renew the authorization to operate the site and emission units.

Permit No: Q3764 Issuance Date: _____

For the Commission

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General Terms and Conditions

The permit holder shall comply with all terms and conditions contained in 30 TAC § 122.143 (General Terms and Conditions), 30 TAC § 122.144 (Recordkeeping Terms and Conditions), 30 TAC § 122.145 (Reporting Terms and Conditions), and 30 TAC § 122.146 (Compliance Certification Terms and Conditions).

In accordance with 30 TAC § 122.144(1), records of required monitoring data and support information required by this permit, or any applicable requirement codified in this permit, are required to be maintained for a period of five years from the date of the monitoring report, sample, or application unless a longer data retention period is specified in an applicable requirement. The five year record retention period supersedes any less stringent retention requirement that may be specified in a condition of a permit identified in the New Source Review Authorization attachment.

If the permit holder chooses to demonstrate that this permit is no longer required, a written request to void this permit shall be submitted to the Texas Commission on Environmental Quality (TCEQ) by the Responsible Official in accordance with 30 TAC § 122.161(e). The permit holder shall comply with the permit's requirements, including compliance certification and deviation reporting, until notified by the TCEQ that this permit is voided.

The permit holder shall comply with 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit.

All reports required by this permit must include in the submittal a cover letter which identifies the following information: company name, TCEQ regulated entity number, air account number (if assigned), site name, area name (if applicable), and Air Permits Division permit number(s).

Special Terms and Conditions: Emission Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting

1. Permit holder shall comply with the following requirements:
 - A. Emission units (including groups and processes) in the Applicable Requirements Summary attachment shall meet the limitations, standards, equipment specifications, monitoring, recordkeeping, reporting, testing, and other requirements listed in the Applicable Requirements Summary attachment to assure compliance with the permit.
 - B. The textual description in the column titled "Textual Description" in the Applicable Requirements Summary attachment is not enforceable and is not deemed as a substitute for the actual regulatory language. The Textual Description is provided for information purposes only.

- C. A citation listed on the Applicable Requirements Summary attachment, which has a notation [G] listed before it, shall include the referenced section and subsection for all commission rules, or paragraphs for all federal and state regulations and all subordinate paragraphs, subparagraphs and clauses, subclauses, and items contained within the referenced citation as applicable requirements.
- D. When a grouped citation, notated with a [G] in the Applicable Requirements Summary, contains multiple compliance options, the permit holder must keep records of when each compliance option was used.
- E. Emission units subject to 40 CFR Part 63, Subpart CC, EEEE, ZZZZ and DDDDDD as identified in the attached Applicable Requirements Summary table are subject to 30 TAC Chapter 113, Subchapter C, §§ 113.340, 113.880, 113.1090 and 113.1130, which incorporates the 40 CFR Part 63 Subpart by reference.
- F. The permit holder shall comply with the following 30 TAC Chapter 101, Subchapter H, Division 3 (Mass Emission Cap and Trade Program) Requirements:
 - (i) Title 30 TAC § 101.352 (relating to General Provisions)
 - (ii) Title 30 TAC § 101.353 (relating to Allocation of Allowances)
 - (iii) Title 30 TAC § 101.354 (relating to Allowance Deductions)
 - (iv) Title 30 TAC § 101.356 (relating to Allowance Banking and Trading)
 - (v) Title 30 TAC § 101.358 (relating to Emission Monitoring and Compliance Demonstration)
 - (vi) Title 30 TAC § 101.359 (relating to Reporting)
 - (vii) Title 30 TAC § 101.360 (relating to Level of Activity Certification)
 - (viii) The terms and conditions by which the emission limits are established to meet or exceed the cap are applicable requirements of this permit
- 2. The permit holder shall comply with the following sections of 30 TAC Chapter 101 (General Air Quality Rules):
 - A. Title 30 TAC § 101.1 (relating to Definitions), insofar as the terms defined in this section are used to define the terms used in other applicable requirements
 - B. Title 30 TAC § 101.3 (relating to Circumvention)

- C. Title 30 TAC § 101.8 (relating to Sampling), if such action has been requested by the TCEQ
 - D. Title 30 TAC § 101.9 (relating to Sampling Ports), if such action has been requested by the TCEQ
 - E. Title 30 TAC § 101.10 (relating to Emissions Inventory Requirements)
 - F. Title 30 TAC § 101.201 (relating to Emission Event Reporting and Recordkeeping Requirements)
 - G. Title 30 TAC § 101.211 (relating to Scheduled Maintenance, Start-up, and Shutdown Reporting and Recordkeeping Requirements)
 - H. Title 30 TAC § 101.221 (relating to Operational Requirements)
 - I. Title 30 TAC § 101.222 (relating to Demonstrations)
 - J. Title 30 TAC § 101.223 (relating to Actions to Reduce Excessive Emissions)
3. Permit holder shall comply with the following requirements of 30 TAC Chapter 111:
- A. Visible emissions from stationary vents with a flow rate of less than 100,000 actual cubic feet per minute and constructed after January 31, 1972 that are not listed in the Applicable Requirements Summary attachment for 30 TAC Chapter 111, Subchapter A, Division 1, shall not exceed 20% opacity averaged over a six-minute period. The permit holder shall comply with the following requirements for stationary vents at the site subject to this standard:
 - (i) Title 30 TAC § 111.111(a)(1)(B) (relating to Requirements for Specified Sources)
 - (ii) Title 30 TAC § 111.111(a)(1)(E)
 - (iii) Title 30 TAC § 111.111(a)(1)(F)(i), (ii), (iii), or (iv)
 - (iv) For emission units with vent emissions subject to 30 TAC § 111.111(a)(1)(B), complying with 30 TAC § 111.111(a)(1)(F)(ii), (iii), or (iv), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146. These periodic monitoring requirements do not apply to vents that are not capable of producing visible emissions such as vents that emit only colorless VOCs; vents from non-fuming liquids; vents that provide passive ventilation, such as

plumbing vents; or vent emissions from any other source that does not obstruct the transmission of light. Vents, as specified in the “Applicable Requirements Summary” attachment, that are subject to the emission limitation of 30 TAC § 111.111(a)(1)(B) are not subject to the following periodic monitoring requirements:

- (1) An observation of stationary vents from emission units in operation shall be conducted at least once during each calendar quarter unless the emission unit is not operating for the entire quarter.
- (2) For stationary vents from a combustion source, if an alternative to the normally fired fuel is fired for a period greater than or equal to 24 consecutive hours, the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are present. If such period is greater than 3 months, observations shall be conducted once during each quarter. Supplementing the normally fired fuel with natural gas or fuel gas to increase the net heating value to the minimum required value does not constitute creation of an alternative fuel.
- (3) Records of all observations shall be maintained.
- (4) Visible emissions observations of emission units operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of emission units operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions observations shall be made during times when the activities described in 30 TAC § 111.111(a)(1)(E) are not taking place. Visible emissions shall be determined with each stationary vent in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each stationary vent during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer’s eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

(5) Compliance Certification:

- (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(1) and (a)(1)(B).
 - (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(1)(F) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.
 - (c) Some vents may be subject to multiple visible emission or monitoring requirements. All credible data must be considered when certifying compliance with this requirement even if the observation or monitoring was performed to demonstrate compliance with a different requirement.
- B. Certification of opacity readers determining opacities under Method 9 (as outlined in 40 CFR Part 60, Appendix A) to comply with opacity monitoring requirements shall be accomplished by completing the Visible Emissions Evaluators Course, or approved agency equivalent, no more than 180 days before the opacity reading.
- C. Permit holders for sites that have materials handling, construction, roads, streets, alleys, and parking lots shall comply with the following requirements:
- (i) Title 30 TAC § 111.143 (relating to Materials Handling)
 - (ii) Title 30 TAC § 111.145 (relating to Construction and Demolition)
 - (iii) Title 30 TAC § 111.147 (relating to Roads, Streets, and Alleys)

- (iv) Title 30 TAC § 111.149 (relating to Parking Lots)
- D. Emission limits on nonagricultural processes, except for the steam generators specified in 30 TAC § 111.153, shall comply with the following requirements:
 - (i) Emissions of PM from any source may not exceed the allowable rates as required in 30 TAC § 111.151(a) (relating to Allowable Emissions Limits)
 - (ii) Sources with an effective stack height (h_e) less than the standard effective stack height (H_e), must reduce the allowable emission level by multiplying it by $[h_e/H_e]^2$ as required in 30 TAC § 111.151(b)
 - (iii) Effective stack height shall be calculated by the equation specified in 30 TAC § 111.151(c)
- 4. For storage vessels maintaining working pressure as specified in 30 TAC Chapter 115, Subchapter B, Division 1: Storage of Volatile Organic Compounds, the permit holder shall comply with the requirements of 30 TAC § 115.112(e)(1).
- 5. For industrial wastewater specified in 30 TAC Chapter 115, Subchapter B, the permit holder shall comply with the following requirements:
 - A. Title 30 TAC § 115.145 (relating to Approved Test Methods)
 - B. Title 30 TAC § 115.146 (relating to Recordkeeping Requirements)
 - C. Title 30 TAC § 115.147(1) (relating to Exemptions)
 - D. Title 30 TAC § 115.148 (relating to Determination of Wastewater Characteristics)
 - E. Title 30 TAC § 115.147(7), (7)(A) and (B) (relating to Exemptions)
- 6. Permit holder shall comply with the following 30 TAC Chapter 115, Subchapter D requirements:
 - A. Title 30 TAC § 115.312(a)(1) (relating to Control Requirements), for emissions during Process Unit Shutdown or Turnaround
 - B. Title 30 TAC § 115.316(a)(2) (relating to Recordkeeping Requirements), for Process Unit Shutdown or Turnaround
- 7. The permit holder shall comply with the following requirements for units subject to any subpart of 40 CFR Part 60, unless otherwise stated in the applicable subpart:
 - A. Title 40 CFR § 60.7 (relating to Notification and Recordkeeping)

- B. Title 40 CFR § 60.8 (relating to Performance Tests)
 - C. Title 40 CFR § 60.11 (relating to Compliance with Standards and Maintenance Requirements)
 - D. Title 40 CFR § 60.12 (relating to Circumvention)
 - E. Title 40 CFR § 60.13 (relating to Monitoring Requirements)
 - F. Title 40 CFR § 60.14 (relating to Modification)
 - G. Title 40 CFR § 60.15 (relating to Reconstruction)
 - H. Title 40 CFR § 60.19 (relating to General Notification and Reporting Requirements)
8. For petroleum refinery facilities subject to 40 CFR Part 60, Subpart QQQ, the permit holder shall comply with the following requirements:
- A. Title 40 CFR § 60.692-1(a) - (c) (relating to Standards: General)
 - B. Title 40 CFR § 60.692-2(a) - (c), (e) (relating to Standards: Individual Drain Systems)
 - C. Title 40 CFR § 60.692-6(a) - (b) (relating to Standards: Delay of Repair)
 - D. Title 40 CFR § 60.692-7(a) - (b) (relating to Standards: Delay of Compliance)
 - E. Title 40 CFR § 60.693-1(a) - (d), (e)(1) - (3) (relating to Alternative Standards for Individual Drain Systems)
 - F. Title 40 CFR § 60.697(a), (b)(1) - (3) (relating to Recordkeeping Requirements), as applicable to Individual Drain Systems
 - G. Title 40 CFR § 60.697(f)(1) - (2), (g) (relating to Recordkeeping Requirements), as applicable to Individual Drain Systems
 - H. Title 40 CFR § 60.697(h) (relating to Recordkeeping Requirements), as applicable to excluded Stormwater Sewer Systems
 - I. Title 40 CFR § 60.698(a), and (b)(1) (relating to Reporting Requirements), as applicable to Individual Drain Systems
 - J. Title 40 CFR § 60.698(c) (relating to Reporting Requirements), for water seal breaches in Drain Systems
 - K. Title 40 CFR § 60.698(e) (relating to Reporting Requirements), as applicable to Individual Drain Systems

9. The permit holder shall comply with the following requirements for units subject to any subpart of 40 CFR Part 61, unless otherwise stated in the applicable subpart:
 - A. Title 40 CFR § 61.05 (relating to Prohibited Activities)
 - B. Title 40 CFR § 61.07 (relating to Application for Approval of Construction or Modification)
 - C. Title 40 CFR § 61.09 (relating to Notification of Start-up)
 - D. Title 40 CFR § 61.10 (relating to Source Reporting and Request Waiver)
 - E. Title 40 CFR § 61.12 (relating to Compliance with Standards and Maintenance Requirements)
 - F. Title 40 CFR § 61.13 (relating to Emissions Tests and Waiver of Emission Tests)
 - G. Title 40 CFR § 61.14 (relating to Monitoring Requirements)
 - H. Title 40 CFR § 61.15 (relating to Modification)
 - I. Title 40 CFR § 61.19 (relating to Circumvention)
10. For facilities where total annual benzene quantity from waste is less than 1 megagram per year and subject to emission standards in 40 CFR Part 61, Subpart FF, the permit holder shall comply with the following requirements:
 - A. Title 40 CFR § 61.355(a)(1)(iii), (a)(2), (a)(5)(i) - (ii), (a)(6), (b), and (c)(1) - (3) (relating to Test Methods, Procedures, and Compliance Provisions), for calculation procedures
 - B. Title 40 CFR § 61.356(a) (relating to Recordkeeping Requirements)
 - C. Title 40 CFR § 61.356(b), and (b)(1) (relating to Recordkeeping Requirements)
 - D. Title 40 CFR § 61.357(a), and (b) (relating to Reporting Requirements)
11. The permit holder shall comply with the requirements of 30 TAC Chapter 113, Subchapter C, § 113.100 for units subject to any subpart of 40 CFR Part 63, unless otherwise stated in the applicable subpart.
12. For sources subject to emission standards in 40 CFR Part 63, Subpart CC, the permit holder shall comply with the following requirements (Title 30 TAC Chapter 113, Subchapter C, § 113.340 incorporated by reference):

- A. Title 40 CFR § 63.640(l)(3) - (4) (relating to Applicability and Designation of Affected Source), for units and equipment added to an existing source
- B. Title 40 CFR § 63.640(m)(1) - (2) (relating to Applicability and Designation of Affected Source), for units and emission points changing from Group 2 to Group 1 status
- C. Title 40 CFR § 63.642(c) (relating to General Standards), for applicability of the General Provisions of Subpart A
- D. Title 40 CFR § 63.642(e) (relating to General Standards), for recordkeeping
- E. Title 40 CFR § 63.642(f) (relating to General Standards), for reporting

Additional Monitoring Requirements

- 13. The permit holder shall comply with the periodic monitoring requirements as specified in the attached “Periodic Monitoring Summary” upon issuance of the permit. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permit holder shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time specified in the “Periodic Monitoring Summary,” for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances to avoid reporting deviations. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).

New Source Review Authorization Requirements

- 14. Permit holder shall comply with the requirements of New Source Review authorizations issued or claimed by the permit holder for the permitted area, including permits, permits by rule, standard permits, flexible permits, special permits, permits for existing facilities including Voluntary Emissions Reduction Permits and Electric Generating Facility Permits issued under 30 TAC Chapter 116, Subchapter I, or special exemptions referenced in the New Source Review Authorization References attachment. These requirements:
 - A. Are incorporated by reference into this permit as applicable requirements
 - B. Shall be located with this operating permit
 - C. Are not eligible for a permit shield

15. The permit holder shall comply with the general requirements of 30 TAC Chapter 106, Subchapter A or the general requirements, if any, in effect at the time of the claim of any PBR.
16. The permit holder shall maintain records to demonstrate compliance with any emission limitation or standard that is specified in a permit by rule (PBR) or Standard Permit listed in the New Source Review Authorizations attachment. The records shall yield reliable data from the relevant time period that are representative of the emission unit's compliance with the PBR or Standard Permit. These records may include, but are not limited to, production capacity and throughput, hours of operation, safety data sheets (SDS), chemical composition of raw materials, speciation of air contaminant data, engineering calculations, maintenance records, fugitive data, performance tests, capture/control device efficiencies, direct pollutant monitoring (CEMS, COMS, or PEMS), or control device parametric monitoring. These records shall be made readily accessible and available as required by 30 TAC § 122.144. Any monitoring or recordkeeping data indicating noncompliance with the PBR or Standard Permit shall be considered and reported as a deviation according to 30 TAC § 122.145 (Reporting Terms and Conditions).

Compliance Requirements

17. The permit holder shall certify compliance in accordance with 30 TAC § 122.146. The permit holder shall comply with 30 TAC § 122.146 using at a minimum, but not limited to, the continuous or intermittent compliance method data from monitoring, recordkeeping, reporting, or testing required by the permit and any other credible evidence or information. The certification period may not exceed 12 months and the certification must be submitted within 30 days after the end of the period being certified.
18. Permit holder shall comply with the following 30 TAC Chapter 117 requirements:
 - A. The permit holder shall comply with the compliance schedules and submit written notification to the TCEQ Executive Director as required in 30 TAC Chapter 117, Subchapter H, Division 1:
 - (i) For sources in the Houston-Galveston-Brazoria Nonattainment area, 30 TAC § 117.9020:
 - (1) Title 30 TAC § 117.9020(2)(A), (C), and (D)
 - B. The permit holder shall comply with the Initial Control Plan unit listing requirement in 30 TAC § 117.350(c) and (c)(1).
 - C. The permit holder shall comply with the requirements of 30 TAC § 117.354 for Final Control Plan Procedures for Attainment Demonstration Emission Specifications and 30 TAC § 117.356 for Revision of Final Control Plan.

19. Use of Emission Credits to comply with applicable requirements:
- A. Unless otherwise prohibited, the permit holder may use emission credits to comply with the following applicable requirements listed elsewhere in this permit:
 - (i) Title 30 TAC Chapter 115
 - (ii) Title 30 TAC Chapter 117
 - (iii) Offsets for Title 30 TAC Chapter 116
 - B. The permit holder shall comply with the following requirements in order to use the emission credits to comply with the applicable requirements:
 - (i) The permit holder must notify the TCEQ according to 30 TAC § 101.306(c)(2)
 - (ii) The emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 1
 - (iii) The executive director has approved the use of the credit according to 30 TAC § 101.306(c)(2)
 - (iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.302(g) and 30 TAC Chapter 122
 - (v) Title 30 TAC § 101.305 (relating to Emission Reductions Achieved Outside the United States)
20. Use of Discrete Emission Credits to comply with the applicable requirements:
- A. Unless otherwise prohibited, the permit holder may use discrete emission credits to comply with the following applicable requirements listed elsewhere in this permit:
 - (i) Title 30 TAC Chapter 115
 - (ii) Title 30 TAC Chapter 117
 - (iii) If applicable, offsets for Title 30 TAC Chapter 116
 - (iv) Temporarily exceed state NSR permit allowables
 - B. The permit holder shall comply with the following requirements in order to use the credit to comply with the applicable requirements:

- (i) The permit holder must notify the TCEQ according to 30 TAC § 101.376(d)
- (ii) The discrete emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 4
- (iii) The executive director has approved the use of the discrete emission credits according to 30 TAC § 101.376(d)(1)(A)
- (iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.372(h) and 30 TAC Chapter 122
- (v) Title 30 TAC § 101.375 (relating to Emission Reductions Achieved Outside the United States)

Risk Management Plan

- 21. For processes subject to 40 CFR Part 68 and specified in 40 CFR § 68.10, the permit holder shall comply with the requirements of the Accidental Release Prevention Provisions in 40 CFR Part 68. The permit holder shall submit to the appropriate agency either a compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR § 68.10(a), or as part of the compliance certification submitted under this permit, a certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of a risk management plan.

Permit Location

- 22. The permit holder shall maintain a copy of this permit and records related to requirements listed in this permit on site.

Permit Shield (30 TAC § 122.148)

- 23. A permit shield is granted for the emission units, groups, or processes specified in the attached “Permit Shield.” Compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements listed in the attachment “Permit Shield.” Permit shield provisions shall not be modified by the executive director until notification is provided to the permit holder. No later than 90 days after notification of a change in a determination made by the executive director, the permit holder shall apply for the appropriate permit revision to reflect the new determination. Provisional terms are not eligible for this permit shield. Any term or condition, under a permit shield, shall not be protected by the permit shield if it is replaced by a provisional term or condition or the basis of the term and condition changes.

Attachments

Applicable Requirements Summary

Additional Monitoring Requirements

Permit Shield

New Source Review Authorization References

Applicable Requirements Summary

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Note: A “none” entry may be noted for some emission sources in this permit’s “Applicable Requirements Summary” under the heading of “Monitoring and Testing Requirements” and/or “Recordkeeping Requirements” and/or “Reporting Requirements.” Such a notation indicates that there are no requirements for the indicated emission source as identified under the respective column heading(s) for the stated portion of the regulation when the emission source is operating under the conditions of the specified SOP Index Number. However, other relevant requirements pursuant to 30 TAC Chapter 122 including Recordkeeping Terms and Conditions (30 TAC § 122.144), Reporting Terms and Conditions (30 TAC § 122.145), and Compliance Certification Terms and Conditions (30 TAC § 122.146) continue to apply.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
100-11	STORAGE TANKS/VESSELS	N/A	R5112-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
100-11	STORAGE TANKS/VESSELS	N/A	63CC-02	40 CFR Part 63, Subpart CC	No changing attributes.
100-12	STORAGE TANKS/VESSELS	N/A	R5112-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
100-12	STORAGE TANKS/VESSELS	N/A	63CC-02	40 CFR Part 63, Subpart CC	No changing attributes.
100-13	STORAGE TANKS/VESSELS	N/A	R5112-01	30 TAC Chapter 115, Storage of VOCs	True Vapor Pressure = True vapor pressure is less than 1.0 psia
100-13	STORAGE TANKS/VESSELS	N/A	R5112-02	30 TAC Chapter 115, Storage of VOCs	True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia
100-13	STORAGE TANKS/VESSELS	N/A	63CC-01	40 CFR Part 63, Subpart CC	Group 1 Storage Vessel = The storage vessel is a Group 1 storage vessel (as defined in 40 CFR § 63.641), Existing Source = The storage vessel is at a new source., True Vapor Pressure = Maximum true vapor pressure of the total organic HAPs in the liquid is less than 11.11 psi (76.6 kPa), Emission Control Type = Fixed roof and an internal floating roof, Seal Type = Two seals mounted one above the other so that each forms a

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
					continuous closure that completely cover the space between the wall of the storage vessel and the edge of the internal floating roof
100-13	STORAGE TANKS/VESSELS	N/A	63CC-02	40 CFR Part 63, Subpart CC	Group 1 Storage Vessel = The storage vessel is a Group 2 vessel., Applicability = The storage vessel is required to comply with 40 CFR Part 63, Subpart CC and is part of a process unit.
100-14	STORAGE TANKS/VESSELS	N/A	R5112-02	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
100-14	STORAGE TANKS/VESSELS	N/A	63CC-01	40 CFR Part 63, Subpart CC	No changing attributes.
100-15	STORAGE TANKS/VESSELS	N/A	R5112-03	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
100-15	STORAGE TANKS/VESSELS	N/A	63CC-01	40 CFR Part 63, Subpart CC	No changing attributes.
100-20	STORAGE TANKS/VESSELS	N/A	R5112-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
100-20	STORAGE TANKS/VESSELS	N/A	63CC-02	40 CFR Part 63, Subpart CC	No changing attributes.
100-21	STORAGE TANKS/VESSELS	N/A	R5112-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
100-21	STORAGE TANKS/VESSELS	N/A	63CC-02	40 CFR Part 63, Subpart CC	No changing attributes.
120-22	STORAGE TANKS/VESSELS	N/A	R5112-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
120-22	STORAGE TANKS/VESSELS	N/A	63CC-02	40 CFR Part 63, Subpart CC	No changing attributes.
120-23	STORAGE TANKS/VESSELS	N/A	R5112-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
120-23	STORAGE TANKS/VESSELS	N/A	63CC-02	40 CFR Part 63, Subpart CC	No changing attributes.
120-24	STORAGE TANKS/VESSELS	N/A	R5112-02	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
120-24	STORAGE TANKS/VESSELS	N/A	63CC-01	40 CFR Part 63, Subpart CC	No changing attributes.
120-25	STORAGE TANKS/VESSELS	N/A	R5112-02	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
120-25	STORAGE TANKS/VESSELS	N/A	63CC-01	40 CFR Part 63, Subpart CC	No changing attributes.
150-10	STORAGE TANKS/VESSELS	N/A	R5112-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
150-10	STORAGE TANKS/VESSELS	N/A	63CC-02	40 CFR Part 63, Subpart CC	No changing attributes.
200-1	STORAGE TANKS/VESSELS	N/A	R5112-03	30 TAC Chapter 115, Storage of VOCs	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
200-1	STORAGE TANKS/VESSELS	N/A	63CC-01	40 CFR Part 63, Subpart CC	No changing attributes.
200-2	STORAGE TANKS/VESSELS	N/A	R5112-03	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
200-2	STORAGE TANKS/VESSELS	N/A	63CC-01	40 CFR Part 63, Subpart CC	No changing attributes.
200-3	STORAGE TANKS/VESSELS	N/A	R5112-03	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
200-3	STORAGE TANKS/VESSELS	N/A	63CC-01	40 CFR Part 63, Subpart CC	No changing attributes.
5-0	STORAGE TANKS/VESSELS	N/A	R5112-02	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
5-0	STORAGE TANKS/VESSELS	N/A	60Kb-01	40 CFR Part 60, Subpart Kb	No changing attributes.
5-0	STORAGE TANKS/VESSELS	N/A	63CC-02	40 CFR Part 63, Subpart CC	No changing attributes.
DEGREASER	SOLVENT DEGREASING MACHINES	N/A	R5412-01	30 TAC Chapter 115, Degreasing Processes	No changing attributes.
EGEN-1	SRIC ENGINES	N/A	R7303-01	30 TAC Chapter 117, Subchapter B	No changing attributes.
EGEN-1	SRIC ENGINES	N/A	60JJJJ-01	40 CFR Part 60, Subpart JJJJ	No changing attributes.
EGEN-1	SRIC ENGINES	N/A	63ZZZZ-01	40 CFR Part 63, Subpart ZZZZ	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
F-101	PROCESS HEATERS/FURNACES	N/A	R7310-01	30 TAC Chapter 117, Subchapter B	Fuel Type #1 = Natural gas Fuel Type #2 = No second fuel
F-101	PROCESS HEATERS/FURNACES	N/A	R7310-02	30 TAC Chapter 117, Subchapter B	Fuel Type #1 = Natural gas Fuel Type #2 = Gaseous fuel other than natural gas, landfill gas or renewable non-fossil fuel gases
F-101	BOILERS/STEAM GENERATORS/STEAM GENERATING UNITS	N/A	60Db-01	40 CFR Part 60, Subpart Db	D-Series Fuel Type #1 = Natural gas D-Series Fuel Type #2 = No second fuel
F-101	BOILERS/STEAM GENERATORS/STEAM GENERATING UNITS	N/A	60Db-02	40 CFR Part 60, Subpart Db	D-Series Fuel Type #1 = Natural Gas D-Series Fuel Type #2 = Gaseous fossil fuel other than natural gas and coal-derived synthetic fuel meeting the definition of natural gas.
F-101	FCCU CAT REGEN/FUEL GAS COMBUSTION/CLAUS SRU	N/A	60Ja-01	40 CFR Part 60, Subpart Ja	No changing attributes.
F-101	PROCESS HEATERS/FURNACES	N/A	63DDDDDD-01	40 CFR Part 63, Subpart DDDDDD	No changing attributes.
F-201	PROCESS HEATERS/FURNACES	N/A	R7310-01	30 TAC Chapter 117, Subchapter B	Fuel Type #1 = Natural gas Fuel Type #2 = No second fuel
F-201	PROCESS	N/A	R7310-02	30 TAC Chapter 117,	Fuel Type #1 = Natural gas

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
	HEATERS/FURNACES			Subchapter B	Fuel Type #2 = Gaseous fuel other than natural gas, landfill gas or renewable non-fossil fuel gases
F-201	BOILERS/STEAM GENERATORS/STEAM GENERATING UNITS	N/A	60Db-01	40 CFR Part 60, Subpart Db	D-Series Fuel Type #1 = Natural gas D-Series Fuel Type #2 = No second fuel
F-201	BOILERS/STEAM GENERATORS/STEAM GENERATING UNITS	N/A	60Db-02	40 CFR Part 60, Subpart Db	D-Series Fuel Type #1 = Natural Gas D-Series Fuel Type #2 = Gaseous fossil fuel other than natural gas and coal-derived synthetic fuel meeting the definition of natural gas.
F-201	FCCU CAT REGEN/FUEL GAS COMBUSTION/CLAUS SRU	N/A	60Ja-01	40 CFR Part 60, Subpart Ja	No changing attributes.
F-201	PROCESS HEATERS/FURNACES	N/A	63DDDDDD-01	40 CFR Part 63, Subpart DDDDD	No changing attributes.
FL-101	FLARES	N/A	R1111-01	30 TAC Chapter 111, Visible Emissions	No changing attributes.
FL-101	FLARES	N/A	60A-01	40 CFR Part 60, Subpart A	No changing attributes.
FL-101	FCCU CAT REGEN/FUEL GAS	N/A	60Ja-02	40 CFR Part 60, Subpart Ja	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
	COMBUSTION/CLAUS SRU				
FUG	FUGITIVE EMISSION UNITS	N/A	R5352-01	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	No changing attributes.
FUG	FUGITIVE EMISSION UNITS	N/A	60GGGa	40 CFR Part 60, Subpart GGGa	No changing attributes.
FUG	FUGITIVE EMISSION UNITS	N/A	63EEEE	40 CFR Part 63, Subpart EEEE	No changing attributes.
MISC-ADH	SURFACE COATING OPERATIONS	N/A	R5471-01	30 TAC Chapter 115, Subchapter E, Division 7	No changing attributes.
TK-101	STORAGE TANKS/VESSELS	N/A	63CC-02	40 CFR Part 63, Subpart CC	No changing attributes.

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
100-11	EU	R5112-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
100-11	EU	63CC-02	112(B) HAPS	40 CFR Part 63, Subpart CC	§ 63.640(c)(2)	All Group 2 storage vessels associated with petroleum refining process units meeting the criteria in paragraph (a) of this section are part of the affected source.	§ 63.646(b)(1) § 63.646(b)(2)	§ 63.646(b)(1) § 63.655(g)(7)(ii) § 63.655(i)(1)(iv) § 63.655(i)(5)	§ 63.655(f) § 63.655(f)(1)(i)(A) § 63.655(g) § 63.655(g)(7) § 63.655(g)(7)(i) § 63.655(h) § 63.655(h)(6) § 63.655(h)(6)(ii)
100-12	EU	R5112-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
100-12	EU	63CC-02	112(B) HAPS	40 CFR Part 63, Subpart CC	§ 63.640(c)(2)	All Group 2 storage vessels associated with petroleum refining process units meeting the criteria in paragraph (a) of this section are part of the affected source.	§ 63.646(b)(1) § 63.646(b)(2)	§ 63.646(b)(1) § 63.655(g)(7)(ii) § 63.655(i)(1)(iv) § 63.655(i)(5)	§ 63.655(f) § 63.655(f)(1)(i)(A) § 63.655(g) § 63.655(g)(7) § 63.655(g)(7)(i) § 63.655(h) § 63.655(h)(6) § 63.655(h)(6)(ii)
100-13	EU	R5112-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						division.			
100-13	EU	R5112-02	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(e)(1) § 115.112(e)(2) § 115.112(e)(2)(A) § 115.112(e)(2)(B) § 115.112(e)(2)(C) § 115.112(e)(2)(D) § 115.112(e)(2)(F) [G]§ 115.112(e)(2)(I) § 115.114(a)(1)(A)	No person shall place, store, or hold VOC in any storage tank unless the storage tank is capable of maintaining working pressure sufficient at all times to prevent any vapor or gas loss to the atmosphere or is in compliance with the control requirements specified in Table 1 of this paragraph for VOC other than crude oil and condensate or Table 2 of subsection (a)(1) of this paragraph for crude oil and condensate.	§ 115.114(a)(1) § 115.114(a)(1)(A) [G]§ 115.117	§ 115.118(a)(3) § 115.118(a)(5) § 115.118(a)(6)(C) § 115.118(a)(7)	§ 115.114(a)(1)(B) § 115.118(a)(3)
100-13	EU	63CC-01	112(B) HAPS	40 CFR Part 63, Subpart CC	§ 63.646(a) § 63.119(a)(1) [G]§ 63.119(b)(1) § 63.119(b)(2) § 63.119(b)(3)(iii) § 63.119(b)(4) [G]§ 63.119(b)(5) § 63.119(b)(6) § 63.120(a)(4) § 63.120(a)(7) § 63.646(g)	Each owner or operator of a Group 1 storage vessel subject to this subpart shall comply with the requirements of §63.119 - §63.121 except as provided in §63.646(b)-(l).	§ 63.120(a)(3)(i) § 63.120(a)(3)(ii) § 63.120(a)(3)(iii) § 63.646(b)(1)	§ 63.120(a)(4) § 63.642(e) § 63.646(b)(1) § 63.655(h)(1) [G]§ 63.655(i)(1) § 63.655(i)(5)	§ 63.120(a)(5) § 63.120(a)(6) § 63.642(f) § 63.655(f) § 63.655(f)(6) § 63.655(g) § 63.655(g)(2) [G]§ 63.655(g)(2)(ii) § 63.655(h) § 63.655(h)(1) § 63.655(h)(2)(i) § 63.655(h)(2)(i)(A) § 63.655(h)(2)(i)(B) § 63.655(h)(2)(i)(C) [G]§ 63.655(h)(6)
100-13	EU	63CC-02	112(B) HAPS	40 CFR Part 63, Subpart CC	§ 63.640(c)(2)	All Group 2 storage vessels associated with petroleum refining	§ 63.646(b)(1) § 63.646(b)(2)	§ 63.646(b)(1) § 63.655(g)(7)(ii) § 63.655(i)(1)(iv)	§ 63.655(f) § 63.655(f)(1)(i)(A) § 63.655(g)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						process units meeting the criteria in paragraph (a) of this section are part of the affected source.		§ 63.655(i)(5)	§ 63.655(g)(7) § 63.655(g)(7)(i) § 63.655(h) § 63.655(h)(6) § 63.655(h)(6)(ii)
100-14	EU	R5112-02	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(e)(1) § 115.112(e)(2) § 115.112(e)(2)(A) § 115.112(e)(2)(B) § 115.112(e)(2)(C) § 115.112(e)(2)(D) § 115.112(e)(2)(F) [G]§ 115.112(e)(2)(I) § 115.114(a)(1)(A)	No person shall place, store, or hold VOC in any storage tank unless the storage tank is capable of maintaining working pressure sufficient at all times to prevent any vapor or gas loss to the atmosphere or is in compliance with the control requirements specified in Table 1 of this paragraph for VOC other than crude oil and condensate or Table 2 of subsection (a)(1) of this paragraph for crude oil and condensate.	§ 115.114(a)(1) § 115.114(a)(1)(A) [G]§ 115.117	§ 115.118(a)(3) § 115.118(a)(5) § 115.118(a)(6)(C) § 115.118(a)(7)	§ 115.114(a)(1)(B) § 115.118(a)(3)
100-14	EU	63CC-01	112(B) HAPS	40 CFR Part 63, Subpart CC	§ 63.646(a) § 63.119(a)(1) [G]§ 63.119(b)(1) § 63.119(b)(2) § 63.119(b)(3)(iii) § 63.119(b)(4) [G]§ 63.119(b)(5) § 63.119(b)(6) § 63.120(a)(4) § 63.120(a)(7) § 63.646(g)	Each owner or operator of a Group 1 storage vessel subject to this subpart shall comply with the requirements of §63.119 - §63.121 except as provided in §63.646(b)-(l).	§ 63.120(a)(3)(i) § 63.120(a)(3)(ii) § 63.120(a)(3)(iii) § 63.646(b)(1)	§ 63.120(a)(4) § 63.642(e) § 63.646(b)(1) § 63.655(h)(1) [G]§ 63.655(i)(1) § 63.655(i)(5)	§ 63.120(a)(5) § 63.120(a)(6) § 63.642(f) § 63.655(f) § 63.655(f)(6) § 63.655(g) § 63.655(g)(2) [G]§ 63.655(g)(2)(ii) § 63.655(h) § 63.655(h)(1) § 63.655(h)(2)(i) § 63.655(h)(2)(i)(A) § 63.655(h)(2)(i)(B) § 63.655(h)(2)(i)(C) [G]§ 63.655(h)(6)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
100-15	EU	R5112-03	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(e)(1) § 115.112(e)(2) § 115.112(e)(2)(A) § 115.112(e)(2)(B) § 115.112(e)(2)(C) § 115.112(e)(2)(D) § 115.112(e)(2)(F) [G]§ 115.112(e)(2)(I) § 115.114(a)(1)(A)	No person shall place, store, or hold VOC in any storage tank unless the storage tank is capable of maintaining working pressure sufficient at all times to prevent any vapor or gas loss to the atmosphere or is in compliance with the control requirements specified in Table 1 of this paragraph for VOC other than crude oil and condensate or Table 2 of subsection (a)(1) of this paragraph for crude oil and condensate.	§ 115.114(a)(1) § 115.114(a)(1)(A) [G]§ 115.117	§ 115.118(a)(3) § 115.118(a)(5) § 115.118(a)(6)(C) § 115.118(a)(7)	§ 115.114(a)(1)(B) § 115.118(a)(3)
100-15	EU	63CC-01	112(B) HAPS	40 CFR Part 63, Subpart CC	§ 63.646(a) § 63.119(a)(1) [G]§ 63.119(b)(1) § 63.119(b)(2) § 63.119(b)(3)(iii) § 63.119(b)(4) [G]§ 63.119(b)(5) § 63.119(b)(6) § 63.120(a)(4) § 63.120(a)(7) § 63.646(g)	Each owner or operator of a Group 1 storage vessel subject to this subpart shall comply with the requirements of §63.119 - §63.121 except as provided in §63.646(b)-(l).	§ 63.120(a)(3)(i) § 63.120(a)(3)(ii) § 63.120(a)(3)(iii) § 63.646(b)(1)	§ 63.120(a)(4) § 63.642(e) § 63.646(b)(1) § 63.655(h)(1) [G]§ 63.655(i)(1) § 63.655(i)(5)	§ 63.120(a)(5) § 63.120(a)(6) § 63.642(f) § 63.655(f) § 63.655(f)(6) § 63.655(g) § 63.655(g)(2) [G]§ 63.655(g)(2)(ii) § 63.655(h) § 63.655(h)(1) § 63.655(h)(2)(i) § 63.655(h)(2)(i)(A) § 63.655(h)(2)(i)(B) § 63.655(h)(2)(i)(C) [G]§ 63.655(h)(6)
100-20	EU	R5112-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						the requirements of this division.			
100-20	EU	63CC-02	112(B) HAPS	40 CFR Part 63, Subpart CC	§ 63.640(c)(2)	All Group 2 storage vessels associated with petroleum refining process units meeting the criteria in paragraph (a) of this section are part of the affected source.	§ 63.646(b)(1) § 63.646(b)(2)	§ 63.646(b)(1) § 63.655(g)(7)(ii) § 63.655(i)(1)(iv) § 63.655(i)(5)	§ 63.655(f) § 63.655(f)(1)(i)(A) § 63.655(g) § 63.655(g)(7) § 63.655(g)(7)(i) § 63.655(h) § 63.655(h)(6) § 63.655(h)(6)(ii)
100-21	EU	R5112-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
100-21	EU	63CC-02	112(B) HAPS	40 CFR Part 63, Subpart CC	§ 63.640(c)(2)	All Group 2 storage vessels associated with petroleum refining process units meeting the criteria in paragraph (a) of this section are part of the affected source.	§ 63.646(b)(1) § 63.646(b)(2)	§ 63.646(b)(1) § 63.655(g)(7)(ii) § 63.655(i)(1)(iv) § 63.655(i)(5)	§ 63.655(f) § 63.655(f)(1)(i)(A) § 63.655(g) § 63.655(g)(7) § 63.655(g)(7)(i) § 63.655(h) § 63.655(h)(6) § 63.655(h)(6)(ii)
120-22	EU	R5112-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
120-22	EU	63CC-02	112(B) HAPS	40 CFR Part 63, Subpart CC	§ 63.640(c)(2)	All Group 2 storage vessels associated with petroleum refining	§ 63.646(b)(1) § 63.646(b)(2)	§ 63.646(b)(1) § 63.655(g)(7)(ii) § 63.655(i)(1)(iv)	§ 63.655(f) § 63.655(f)(1)(i)(A) § 63.655(g)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						process units meeting the criteria in paragraph (a) of this section are part of the affected source.		§ 63.655(i)(5)	§ 63.655(g)(7) § 63.655(g)(7)(i) § 63.655(h) § 63.655(h)(6) § 63.655(h)(6)(ii)
120-23	EU	R5112-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
120-23	EU	63CC-02	112(B) HAPS	40 CFR Part 63, Subpart CC	§ 63.640(c)(2)	All Group 2 storage vessels associated with petroleum refining process units meeting the criteria in paragraph (a) of this section are part of the affected source.	§ 63.646(b)(1) § 63.646(b)(2)	§ 63.646(b)(1) § 63.655(g)(7)(ii) § 63.655(i)(1)(iv) § 63.655(i)(5)	§ 63.655(f) § 63.655(f)(1)(i)(A) § 63.655(g) § 63.655(g)(7)(i) § 63.655(h) § 63.655(h)(6) § 63.655(h)(6)(ii)
120-24	EU	R5112-02	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(e)(1) § 115.112(e)(2) § 115.112(e)(2)(A) § 115.112(e)(2)(B) § 115.112(e)(2)(C) § 115.112(e)(2)(D) § 115.112(e)(2)(F) [G]§ 115.112(e)(2)(I) § 115.114(a)(1)(A)	No person shall place, store, or hold VOC in any storage tank unless the storage tank is capable of maintaining working pressure sufficient at all times to prevent any vapor or gas loss to the atmosphere or is in compliance with the control requirements specified in Table 1 of this paragraph for VOC other than crude oil and condensate or Table 2 of subsection (a)(1) of this paragraph for crude oil	§ 115.114(a)(1) § 115.114(a)(1)(A) [G]§ 115.117	§ 115.118(a)(3) § 115.118(a)(5) § 115.118(a)(6)(C) § 115.118(a)(7)	§ 115.114(a)(1)(B) § 115.118(a)(3)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						and condensate.			
120-24	EU	63CC-01	112(B) HAPS	40 CFR Part 63, Subpart CC	§ 63.646(a) § 63.119(a)(1) [G]§ 63.119(b)(1) § 63.119(b)(2) § 63.119(b)(3)(iii) § 63.119(b)(4) [G]§ 63.119(b)(5) § 63.119(b)(6) § 63.120(a)(4) § 63.120(a)(7) § 63.646(g)	Each owner or operator of a Group 1 storage vessel subject to this subpart shall comply with the requirements of §63.119 - §63.121 except as provided in §63.646(b)-(l).	§ 63.120(a)(3)(i) § 63.120(a)(3)(ii) § 63.120(a)(3)(iii) § 63.646(b)(1) § 63.655(h)(1) [G]§ 63.655(i)(1) § 63.655(i)(5)	§ 63.120(a)(4) § 63.642(e) § 63.646(b)(1) § 63.655(h)(1) [G]§ 63.655(i)(1) § 63.655(i)(5)	§ 63.120(a)(5) § 63.120(a)(6) § 63.642(f) § 63.655(f) § 63.655(f)(6) § 63.655(g) § 63.655(g)(2) [G]§ 63.655(g)(2)(ii) § 63.655(h) § 63.655(h)(1) § 63.655(h)(2)(i) § 63.655(h)(2)(i)(A) § 63.655(h)(2)(i)(B) § 63.655(h)(2)(i)(C) [G]§ 63.655(h)(6)
120-25	EU	R5112-02	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(e)(1) § 115.112(e)(2) § 115.112(e)(2)(A) § 115.112(e)(2)(B) § 115.112(e)(2)(C) § 115.112(e)(2)(D) § 115.112(e)(2)(F) [G]§ 115.112(e)(2)(I) § 115.114(a)(1)(A)	No person shall place, store, or hold VOC in any storage tank unless the storage tank is capable of maintaining working pressure sufficient at all times to prevent any vapor or gas loss to the atmosphere or is in compliance with the control requirements specified in Table 1 of this paragraph for VOC other than crude oil and condensate or Table 2 of subsection (a)(1) of this paragraph for crude oil and condensate.	§ 115.114(a)(1) § 115.114(a)(1)(A) [G]§ 115.117	§ 115.118(a)(3) § 115.118(a)(5) § 115.118(a)(6)(C) § 115.118(a)(7)	§ 115.114(a)(1)(B) § 115.118(a)(3)
120-25	EU	63CC-01	112(B) HAPS	40 CFR Part 63, Subpart CC	§ 63.646(a) § 63.119(a)(1) [G]§ 63.119(b)(1)	Each owner or operator of a Group 1 storage vessel subject to this	§ 63.120(a)(3)(i) § 63.120(a)(3)(ii) § 63.120(a)(3)(iii)	§ 63.120(a)(4) § 63.642(e) § 63.646(b)(1)	§ 63.120(a)(5) § 63.120(a)(6) § 63.642(f)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 63.119(b)(2) § 63.119(b)(3)(iii) § 63.119(b)(4) [G]§ 63.119(b)(5) § 63.119(b)(6) § 63.120(a)(4) § 63.120(a)(7) § 63.646(g)	subpart shall comply with the requirements of §63.119 - §63.121 except as provided in §63.646(b)-(l).	§ 63.646(b)(1)	§ 63.655(h)(1) [G]§ 63.655(i)(1) § 63.655(i)(5)	§ 63.655(f) § 63.655(f)(6) § 63.655(g) § 63.655(g)(2) [G]§ 63.655(g)(2)(ii) § 63.655(h) § 63.655(h)(1) § 63.655(h)(2)(i) § 63.655(h)(2)(i)(A) § 63.655(h)(2)(i)(B) § 63.655(h)(2)(i)(C) [G]§ 63.655(h)(6)
150-10	EU	R5112-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
150-10	EU	63CC-02	112(B) HAPS	40 CFR Part 63, Subpart CC	§ 63.640(c)(2)	All Group 2 storage vessels associated with petroleum refining process units meeting the criteria in paragraph (a) of this section are part of the affected source.	§ 63.646(b)(1) § 63.646(b)(2)	§ 63.646(b)(1) § 63.655(g)(7)(ii) § 63.655(i)(1)(iv) § 63.655(i)(5)	§ 63.655(f) § 63.655(f)(1)(i)(A) § 63.655(g) § 63.655(g)(7) § 63.655(g)(7)(i) § 63.655(h) § 63.655(h)(6) § 63.655(h)(6)(ii)
200-1	EU	R5112-03	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(e)(1) § 115.112(e)(2) § 115.112(e)(2)(A) § 115.112(e)(2)(B) § 115.112(e)(2)(C) § 115.112(e)(2)(D) § 115.112(e)(2)(F) [G]§ 115.112(e)(2)(I) § 115.114(a)(1)(A)	No person shall place, store, or hold VOC in any storage tank unless the storage tank is capable of maintaining working pressure sufficient at all times to prevent any vapor or gas loss to the atmosphere or is in compliance with	§ 115.114(a)(1) § 115.114(a)(1)(A) [G]§ 115.117	§ 115.118(a)(3) § 115.118(a)(5) § 115.118(a)(6)(C) § 115.118(a)(7)	§ 115.114(a)(1)(B) § 115.118(a)(3)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						the control requirements specified in Table 1 of this paragraph for VOC other than crude oil and condensate or Table 2 of subsection (a)(1) of this paragraph for crude oil and condensate.			
200-1	EU	63CC-01	112(B) HAPS	40 CFR Part 63, Subpart CC	§ 63.646(a) § 63.119(a)(1) [G]§ 63.119(b)(1) § 63.119(b)(2) § 63.119(b)(3)(iii) § 63.119(b)(4) [G]§ 63.119(b)(5) § 63.119(b)(6) § 63.120(a)(4) § 63.120(a)(7) § 63.646(g)	Each owner or operator of a Group 1 storage vessel subject to this subpart shall comply with the requirements of §63.119 - §63.121 except as provided in §63.646(b)-(l).	§ 63.120(a)(3)(i) § 63.120(a)(3)(ii) § 63.120(a)(3)(iii) § 63.646(b)(1)	§ 63.120(a)(4) § 63.642(e) § 63.646(b)(1) § 63.655(h)(1) [G]§ 63.655(i)(1) § 63.655(i)(5)	§ 63.120(a)(5) § 63.120(a)(6) § 63.642(f) § 63.655(f) § 63.655(f)(6) § 63.655(g) § 63.655(g)(2) [G]§ 63.655(g)(2)(ii) § 63.655(h) § 63.655(h)(1) § 63.655(h)(2)(i) § 63.655(h)(2)(i)(A) § 63.655(h)(2)(i)(B) § 63.655(h)(2)(i)(C) [G]§ 63.655(h)(6)
200-2	EU	R5112-03	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(e)(1) § 115.112(e)(2) § 115.112(e)(2)(A) § 115.112(e)(2)(B) § 115.112(e)(2)(C) § 115.112(e)(2)(D) § 115.112(e)(2)(F) [G]§ 115.112(e)(2)(I) § 115.114(a)(1)(A)	No person shall place, store, or hold VOC in any storage tank unless the storage tank is capable of maintaining working pressure sufficient at all times to prevent any vapor or gas loss to the atmosphere or is in compliance with the control requirements specified in Table 1 of this paragraph for VOC other than crude oil and condensate or Table 2 of	§ 115.114(a)(1) § 115.114(a)(1)(A) [G]§ 115.117	§ 115.118(a)(3) § 115.118(a)(5) § 115.118(a)(6)(C) § 115.118(a)(7)	§ 115.114(a)(1)(B) § 115.118(a)(3)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						subsection (a)(1) of this paragraph for crude oil and condensate.			
200-2	EU	63CC-01	112(B) HAPS	40 CFR Part 63, Subpart CC	§ 63.646(a) § 63.119(a)(1) [G]§ 63.119(b)(1) § 63.119(b)(2) § 63.119(b)(3)(iii) § 63.119(b)(4) [G]§ 63.119(b)(5) § 63.119(b)(6) § 63.120(a)(4) § 63.120(a)(7) § 63.646(g)	Each owner or operator of a Group 1 storage vessel subject to this subpart shall comply with the requirements of §63.119 - §63.121 except as provided in §63.646(b)-(l).	§ 63.120(a)(3)(i) § 63.120(a)(3)(ii) § 63.120(a)(3)(iii) § 63.646(b)(1)	§ 63.120(a)(4) § 63.642(e) § 63.646(b)(1) § 63.655(h)(1) [G]§ 63.655(i)(1) § 63.655(i)(5)	§ 63.120(a)(5) § 63.120(a)(6) § 63.642(f) § 63.655(f) § 63.655(f)(6) § 63.655(g) § 63.655(g)(2) [G]§ 63.655(g)(2)(ii) § 63.655(h) § 63.655(h)(1) § 63.655(h)(2)(i) § 63.655(h)(2)(i)(A) § 63.655(h)(2)(i)(B) § 63.655(h)(2)(i)(C) [G]§ 63.655(h)(6)
200-3	EU	R5112-03	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(e)(1) § 115.112(e)(2) § 115.112(e)(2)(A) § 115.112(e)(2)(B) § 115.112(e)(2)(C) § 115.112(e)(2)(D) § 115.112(e)(2)(F) [G]§ 115.112(e)(2)(I) § 115.114(a)(1)(A)	No person shall place, store, or hold VOC in any storage tank unless the storage tank is capable of maintaining working pressure sufficient at all times to prevent any vapor or gas loss to the atmosphere or is in compliance with the control requirements specified in Table 1 of this paragraph for VOC other than crude oil and condensate or Table 2 of subsection (a)(1) of this paragraph for crude oil and condensate.	§ 115.114(a)(1) § 115.114(a)(1)(A) [G]§ 115.117	§ 115.118(a)(3) § 115.118(a)(5) § 115.118(a)(6)(C) § 115.118(a)(7)	§ 115.114(a)(1)(B) § 115.118(a)(3)
200-3	EU	63CC-01	112(B)	40 CFR Part 63,	§ 63.646(a)	Each owner or operator	§ 63.120(a)(3)(i)	§ 63.120(a)(4)	§ 63.120(a)(5)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
			HAPS	Subpart CC	§ 63.119(a)(1) [G]§ 63.119(b)(1) § 63.119(b)(2) § 63.119(b)(3)(iii) § 63.119(b)(4) [G]§ 63.119(b)(5) § 63.119(b)(6) § 63.120(a)(4) § 63.120(a)(7) § 63.646(g)	of a Group 1 storage vessel subject to this subpart shall comply with the requirements of §63.119 - §63.121 except as provided in §63.646(b)-(l).	§ 63.120(a)(3)(ii) § 63.120(a)(3)(iii) § 63.646(b)(1)	§ 63.642(e) § 63.646(b)(1) § 63.655(h)(1) [G]§ 63.655(i)(1) § 63.655(i)(5)	§ 63.120(a)(6) § 63.642(f) § 63.655(f) § 63.655(f)(6) § 63.655(g) § 63.655(g)(2) [G]§ 63.655(g)(2)(ii) § 63.655(h) § 63.655(h)(1) § 63.655(h)(2)(i) § 63.655(h)(2)(i)(A) § 63.655(h)(2)(i)(B) § 63.655(h)(2)(i)(C) [G]§ 63.655(h)(6)
5-0	EU	R5112-02	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(e)(1) § 115.112(e)(2) § 115.112(e)(2)(A) § 115.112(e)(2)(B) § 115.112(e)(2)(C) § 115.112(e)(2)(D) § 115.112(e)(2)(F) [G]§ 115.112(e)(2)(I) § 115.114(a)(1)(A)	No person shall place, store, or hold VOC in any storage tank unless the storage tank is capable of maintaining working pressure sufficient at all times to prevent any vapor or gas loss to the atmosphere or is in compliance with the control requirements specified in Table 1 of this paragraph for VOC other than crude oil and condensate or Table 2 of subsection (a)(1) of this paragraph for crude oil and condensate.	§ 115.114(a)(1) § 115.114(a)(1)(A) [G]§ 115.117	§ 115.118(a)(3) § 115.118(a)(5) § 115.118(a)(6)(C) § 115.118(a)(7)	§ 115.114(a)(1)(B) § 115.118(a)(3)
5-0	EU	60Kb-01	VOC	40 CFR Part 60, Subpart Kb	§ 60.112b(a)(1) § 60.112b(a)(1)(i) § 60.112b(a)(1)(ii)(B) § 60.112b(a)(1)(iii) § 60.112b(a)(1)(iv) § 60.112b(a)(1)(ix)	Storage vessels specified in §60.112b(a) and equipped with a fixed roof in combination with an internal floating roof shall meet the	§ 60.113b(a)(1) [G]§ 60.113b(a)(3) § 60.113b(a)(4) § 60.113b(a)(5) § 60.116b(a) § 60.116b(b)	§ 60.115b § 60.115b(a)(2) § 60.116b(a) § 60.116b(b) § 60.116b(c)	§ 60.113b(a)(5) § 60.115b § 60.115b(a)(1) § 60.115b(a)(4)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 60.112b(a)(1)(v) § 60.112b(a)(1)(vi) § 60.112b(a)(1)(vii) § 60.112b(a)(1)(viii)	specifications listed in §60.112b(a)(1)(i)-(ix).	§ 60.116b(c) § 60.116b(e) § 60.116b(e)(1) § 60.116b(e)(2)(i)		
5-0	EU	63CC-02	112(B) HAPS	40 CFR Part 63, Subpart CC	§ 63.640(c)(2)	All Group 2 storage vessels associated with petroleum refining process units meeting the criteria in paragraph (a) of this section are part of the affected source.	§ 63.646(b)(1) § 63.646(b)(2)	§ 63.646(b)(1) § 63.655(g)(7)(ii) § 63.655(i)(1)(iv) § 63.655(i)(5)	§ 63.655(f) § 63.655(f)(1)(i)(A) § 63.655(g) § 63.655(g)(7) § 63.655(g)(7)(i) § 63.655(h) § 63.655(h)(6) § 63.655(h)(6)(ii)
DEGREASER	EU	R5412-01	VOC	30 TAC Chapter 115, Degreasing Processes	§ 115.412(1) [G]§ 115.412(1)(A) § 115.412(1)(C) [G]§ 115.412(1)(F) § 115.417(1)	Cold solvent cleaning. No person shall own or operate a system utilizing a VOC for the cold solvent cleaning of objects without the controls listed in §115.412(1)(A)-(F).	[G]§ 115.415(1) § 115.415(3) ** See Periodic Monitoring Summary	None	None
EGEN-1	EU	R7303-01	EXEMPT	30 TAC Chapter 117, Subchapter B	§ 117.303(a)(6)(D)	Units exempted from the provisions of this division, except as specified in §§117.310(f), 117.340(j), 117.345(f)(6) and (10), 117.350(c)(1), and 117.354(a)(5), include stationary gas turbines and stationary internal combustion engines that are used exclusively in emergency situations, except that operation for testing or maintenance purposes is allowed for up to 52 hours per year, based on	None	§ 117.340(j) [G]§ 117.345(f)(6)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						a rolling 12-month average.			
EGEN-1	EU	60JJJJ-01	CO	40 CFR Part 60, Subpart JJJJ	§ 60.4233(e)-Table1 § 60.4234 § 60.4243(b) § 60.4243(b)(2) § 60.4243(b)(2)(ii) [G]§ 60.4243(d) § 60.4243(g) § 60.4246	Owners and operators of stationary emergency SI ICE with a maximum engine power greater than or equal to 130 HP and were manufactured on or after 01/01/2009 must comply with a CO emission limit of 4.0 g/HP-hr, as listed in Table 1 to this subpart.	§ 60.4237(a) § 60.4243(b)(2)(ii) § 60.4244(a) § 60.4244(b) § 60.4244(c) § 60.4244(e)	§ 60.4243(b)(2)(ii) § 60.4245(a)(1) § 60.4245(a)(2) § 60.4245(a)(4) § 60.4245(b)	[G]§ 60.4245(c) § 60.4245(d) [G]§ 60.4245(e)
EGEN-1	EU	60JJJJ-01	NO _x	40 CFR Part 60, Subpart JJJJ	§ 60.4233(e)-Table1 § 60.4234 § 60.4243(b) § 60.4243(b)(2) § 60.4243(b)(2)(ii) [G]§ 60.4243(d) § 60.4243(g) § 60.4246	Owners and operators of stationary emergency SI ICE with a maximum engine power greater than or equal to 130 HP and were manufactured on or after 01/01/2009 must comply with a NO _x emission limit of 2.0 g/HP-hr, as listed in Table 1 to this subpart.	§ 60.4237(a) § 60.4243(b)(2)(ii) § 60.4244(a) § 60.4244(b) § 60.4244(c) § 60.4244(d)	§ 60.4243(b)(2)(ii) § 60.4245(a)(1) § 60.4245(a)(2) § 60.4245(a)(4) § 60.4245(b)	[G]§ 60.4245(c) § 60.4245(d) [G]§ 60.4245(e)
EGEN-1	EU	60JJJJ-01	VOC	40 CFR Part 60, Subpart JJJJ	§ 60.4233(e)-Table1 § 60.4234 § 60.4243(b) § 60.4243(b)(2) § 60.4243(b)(2)(ii) [G]§ 60.4243(d) § 60.4243(g) § 60.4246	Owners and operators of stationary emergency SI ICE with a maximum engine power greater than or equal to 130 HP and were manufactured on or after 01/01/2009 must comply with a VOC emission limit of 1.0 g/HP-hr, as listed in Table 1 to this subpart.	§ 60.4237(a) § 60.4243(b)(2)(ii) § 60.4244(a) § 60.4244(b) § 60.4244(c) § 60.4244(f) § 60.4244(g)	§ 60.4243(b)(2)(ii) § 60.4245(a)(1) § 60.4245(a)(2) § 60.4245(a)(4) § 60.4245(b)	[G]§ 60.4245(c) § 60.4245(d) [G]§ 60.4245(e)
EGEN-1	EU	63ZZZZ-	EXEMPT	40 CFR Part 63,	§ 63.6590(b)(1)	An affected source which	None	None	§ 63.6645(c)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
		01		Subpart ZZZZ	§ 63.6595(c) § 63.6640(f)(1) [G]§ 63.6640(f)(2) § 63.6640(f)(3)	meets either of the criteria in paragraphs §63.6590(b)(1)(i)-(ii) of this section does not have to meet the requirements of this subpart and of subpart A of this part except for the initial notification requirements of §63.6645(f).			§ 63.6645(f)
F-101	EU	R7310-01	NO _x	30 TAC Chapter 117, Subchapter B	§ 117.310(d)(3) § 117.310(a) § 117.310(a)(8)(A)(i) § 117.310(b) [G]§ 117.310(e)(1) § 117.310(e)(2) [G]§ 117.310(e)(3) § 117.310(e)(4) § 117.340(f)(1) § 117.340(l)(2) § 117.340(p)(1) § 117.340(p)(3)	An owner or operator may not use the alternative methods specified in §§ 117.315, 117.323 and 117.9800 to comply with the NO _x emission specifications but shall use the mass emissions cap and trade program in Chapter 101, Subchapter H, Division 3, except that electric generating facilities must also comply with the daily and 30-day system cap emission limitations of § 117.320. An owner or operator may use the alternative methods specified in § 117.9800 to comply with § 117.320.	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(c) § 117.335(d) § 117.335(f) § 117.335(f)(2) § 117.335(g) § 117.340(a) § 117.340(c)(1) [G]§ 117.340(c)(3) [G]§ 117.340(f)(2) § 117.340(l)(2) § 117.340(o)(1) § 117.340(p)(1) § 117.8100(a) § 117.8100(a)(1) § 117.8100(a)(1)(A) § 117.8100(a)(1)(B) § 117.8100(a)(1)(B)(i) § 117.8100(a)(1)(B)(ii) § 117.8100(a)(1)(C) § 117.8100(a)(2) [G]§ 117.8100(a)(3) § 117.8100(a)(4) § 117.8100(a)(5) § 117.8100(a)(5)(A) § 117.8100(a)(5)(B)	§ 117.345(a) § 117.345(f) § 117.345(f)(1) [G]§ 117.345(f)(2) § 117.345(f)(8) § 117.345(f)(9) § 117.8100(a)(5)(C)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.345(d) § 117.345(d)(3) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) § 117.8010(2)(C) § 117.8010(2)(D) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8) § 117.8100(c)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
							[G]§ 117.8100(a)(5)(D) [G]§ 117.8100(a)(5)(E) § 117.8100(a)(6)		
F-101	EU	R7310-01	CO	30 TAC Chapter 117, Subchapter B	§ 117.310(c)(1) § 117.310(c)(1)(A) § 117.310(c)(3) § 117.340(f)(1)	CO emissions must not exceed 400 ppmv at 3.0% O ₂ , dry basis.	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(c) § 117.335(d) § 117.335(f) § 117.335(f)(3) § 117.335(g) § 117.340(a) § 117.340(e) [G]§ 117.340(f)(2) § 117.8100(a) § 117.8100(a)(1) § 117.8100(a)(1)(A) § 117.8100(a)(1)(B) § 117.8100(a)(1)(B)(ii) § 117.8100(a)(1)(B)(iii) § 117.8100(a)(1)(C) § 117.8100(a)(2) [G]§ 117.8100(a)(3) § 117.8100(a)(4) § 117.8100(a)(5) § 117.8100(a)(5)(A) § 117.8100(a)(5)(B) [G]§ 117.8100(a)(5)(D) [G]§ 117.8100(a)(5)(E) § 117.8100(a)(6) § 117.8120 § 117.8120(1) § 117.8120(1)(A)	§ 117.345(a) § 117.345(f) § 117.345(f)(1) [G]§ 117.345(f)(2) § 117.345(f)(7) § 117.345(f)(8) § 117.345(f)(9) § 117.8100(a)(5)(C)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.345(d) § 117.345(d)(2) § 117.345(d)(3) § 117.345(d)(4) § 117.345(d)(5) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8) § 117.8100(c)
F-101	EU	R7310-01	NH ₃	30 TAC Chapter 117, Subchapter B	§ 117.310(c)(2) § 117.310(c)(2)(A)	For process heaters that inject urea or ammonia into the exhaust stream for NO _x control, ammonia emissions	§ 117.335(a)(2) § 117.335(a)(4) § 117.335(b) § 117.335(d) § 117.335(e)	§ 117.345(a) § 117.345(f) § 117.345(f)(11) § 117.345(f)(9)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.8010

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						must not exceed 10 ppmv at 3.0% O ₂ , dry.	§ 117.335(g) § 117.340(d) § 117.8000(b) § 117.8000(c) § 117.8000(c)(3) § 117.8000(c)(4) § 117.8000(c)(5) § 117.8000(c)(6) [G]§ 117.8000(d) § 117.8130 § 117.8130(1)		[G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8)
F-101	EU	R7310-02	NO _x	30 TAC Chapter 117, Subchapter B	§ 117.310(d)(3) § 117.310(a) § 117.310(a)(8)(A)(i) § 117.310(b) [G]§ 117.310(e)(1) § 117.310(e)(2) [G]§ 117.310(e)(3) § 117.310(e)(4) § 117.340(f)(1) § 117.340(l)(2) § 117.340(p)(1) § 117.340(p)(3)	An owner or operator may not use the alternative methods specified in §§ 117.315, 117.323 and 117.9800 to comply with the NO _x emission specifications but shall use the mass emissions cap and trade program in Chapter 101, Subchapter H, Division 3, except that electric generating facilities must also comply with the daily and 30-day system cap emission limitations of § 117.320. An owner or operator may use the alternative methods specified in § 117.9800 to comply with § 117.320.	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(c) § 117.335(d) § 117.335(f) § 117.335(f)(2) § 117.335(g) § 117.340(a) § 117.340(c)(1) [G]§ 117.340(c)(3) [G]§ 117.340(f)(2) § 117.340(l)(2) § 117.340(o)(1) § 117.340(p)(1) § 117.8100(a) § 117.8100(a)(1) § 117.8100(a)(1)(A) § 117.8100(a)(1)(B) § 117.8100(a)(1)(B)(i) § 117.8100(a)(1)(B)(ii) § 117.8100(a)(1)(C) § 117.8100(a)(2) [G]§ 117.8100(a)(3) § 117.8100(a)(4) § 117.8100(a)(5) § 117.8100(a)(5)(A) § 117.8100(a)(5)(B)	§ 117.345(a) § 117.345(f) § 117.345(f)(1) [G]§ 117.345(f)(2) § 117.345(f)(8) § 117.345(f)(9) § 117.8100(a)(5)(C)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.345(d) § 117.345(d)(3) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) § 117.8010(2)(C) § 117.8010(2)(D) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8) § 117.8100(c)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
							[G]§ 117.8100(a)(5)(D) [G]§ 117.8100(a)(5)(E) § 117.8100(a)(6)		
F-101	EU	R7310-02	CO	30 TAC Chapter 117, Subchapter B	§ 117.310(c)(1) § 117.310(c)(1)(A) § 117.310(c)(3) § 117.340(f)(1)	CO emissions must not exceed 400 ppmv at 3.0% O ₂ , dry basis.	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(c) § 117.335(d) § 117.335(f) § 117.335(f)(3) § 117.335(g) § 117.340(a) § 117.340(e) [G]§ 117.340(f)(2) § 117.8100(a) § 117.8100(a)(1) § 117.8100(a)(1)(A) § 117.8100(a)(1)(B) § 117.8100(a)(1)(B)(ii) § 117.8100(a)(1)(B)(iii) § 117.8100(a)(1)(C) § 117.8100(a)(2) [G]§ 117.8100(a)(3) § 117.8100(a)(4) § 117.8100(a)(5) § 117.8100(a)(5)(A) § 117.8100(a)(5)(B) [G]§ 117.8100(a)(5)(D) [G]§ 117.8100(a)(5)(E) § 117.8100(a)(6) § 117.8120 § 117.8120(1) § 117.8120(1)(A)	§ 117.345(a) § 117.345(f) § 117.345(f)(1) [G]§ 117.345(f)(2) § 117.345(f)(7) § 117.345(f)(8) § 117.345(f)(9) § 117.8100(a)(5)(C)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.345(d) § 117.345(d)(2) § 117.345(d)(3) § 117.345(d)(4) § 117.345(d)(5) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8) § 117.8100(c)
F-101	EU	R7310-02	NH ₃	30 TAC Chapter 117, Subchapter B	§ 117.310(c)(2) § 117.310(c)(2)(A)	For process heaters that inject urea or ammonia into the exhaust stream for NO _x control, ammonia emissions	§ 117.335(a)(2) § 117.335(a)(4) § 117.335(b) § 117.335(d) § 117.335(e)	§ 117.345(a) § 117.345(f) § 117.345(f)(11) § 117.345(f)(9)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.8010

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						must not exceed 10 ppmv at 3.0% O ₂ , dry.	§ 117.335(g) § 117.340(d) § 117.8000(b) § 117.8000(c) § 117.8000(c)(3) § 117.8000(c)(4) § 117.8000(c)(5) § 117.8000(c)(6) [G]§ 117.8000(d) § 117.8130 § 117.8130(1)		[G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8)
F-101	EU	60Db-01	SO ₂	40 CFR Part 60, Subpart Db	§ 60.42b(k)(1) § 60.42b(e) [G]§ 60.42b(f) § 60.42b(g) § 60.45b(a)	Except as provided in §60.42b(k)(2)-(4) on and after the §60.8 tests, no facility for which construction, reconstruction, or modification began after February 28, 2005, that combusts coal, oil, natural gas, a mixture of these fuels, or a mixture of these fuels with any other fuels shall discharge SO ₂ in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 8 percent (0.08) of the potential SO ₂ emission rate (92 percent reduction) and 520 ng/J (1.2 lb/MMBtu) heat input.	§ 60.45b(b) § 60.45b(c) § 60.45b(c)(1) § 60.45b(f) § 60.45b(g) § 60.45b(h) [G]§ 60.47b(a) § 60.47b(c) § 60.47b(d) [G]§ 60.47b(e)	[G]§ 60.47b(a) [G]§ 60.49b(d) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3) § 60.49b(b) § 60.49b(j) § 60.49b(k) § 60.49b(k)(1) § 60.49b(k)(10) § 60.49b(k)(11) § 60.49b(k)(2) § 60.49b(k)(3) § 60.49b(k)(4) § 60.49b(k)(5) § 60.49b(k)(6) § 60.49b(k)(8) § 60.49b(k)(9) [G]§ 60.49b(n) § 60.49b(v) § 60.49b(w)
F-101	EU	60Db-01	PM	40 CFR Part 60, Subpart Db	§ 60.40b(a)	This subpart applies to each steam generating unit constructed, modified, or reconstructed after	None	[G]§ 60.49b(d) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						6/19/84, and that has a heat input capacity from fuels combusted in the unit > 29 MW (100 MMBtu/hr).			
F-101	EU	60Db-01	PM (OPACITY)	40 CFR Part 60, Subpart Db	§ 60.40b(a)	This subpart applies to each steam generating unit constructed, modified, or reconstructed after 6/19/84, and that has a heat input capacity from fuels combusted in the unit > 29 MW (100 MMBtu/hr).	None	[G]§ 60.49b(d) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3)
F-101	EU	60Db-01	NO _x	40 CFR Part 60, Subpart Db	§ 60.44b(l)(1) § 60.44b(h) § 60.44b(i) § 60.46b(a)	Affected facilities combusting coal, oil, or natural gas, or a mixture of these fuels, or any other fuels: a limit of 86 ng/JI (0.20 lb/million Btu) heat input unless the affected facility meets the specified requirements.	§ 60.46b(c) § 60.46b(e) § 60.46b(e)(1) § 60.46b(e)(4) [G]§ 60.48b(b) § 60.48b(c) § 60.48b(d) § 60.48b(e) [G]§ 60.48b(e)(2) § 60.48b(e)(3) § 60.48b(f) § 60.48b(g)(1)	[G]§ 60.48b(b) § 60.48b(c) [G]§ 60.49b(d) [G]§ 60.49b(g) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3) § 60.49b(b) § 60.49b(h) § 60.49b(h)(4) § 60.49b(i) § 60.49b(v) § 60.49b(w)
F-101	EU	60Db-02	SO ₂	40 CFR Part 60, Subpart Db	§ 60.42b(k)(1) § 60.42b(e) [G]§ 60.42b(f) § 60.42b(g) § 60.45b(a)	Except as provided in §60.42b(k)(2)-(4) on and after the §60.8 tests, no facility for which construction, reconstruction, or modification began after February 28, 2005, that combusts coal, oil, natural gas, a mixture of	§ 60.45b(b) § 60.45b(c) § 60.45b(c)(1) § 60.45b(f) § 60.45b(g) § 60.45b(h) [G]§ 60.47b(a) § 60.47b(c) § 60.47b(d) [G]§ 60.47b(e)	[G]§ 60.47b(a) [G]§ 60.49b(d) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3) § 60.49b(b) § 60.49b(j) § 60.49b(k) § 60.49b(k)(1) § 60.49b(k)(10) § 60.49b(k)(11) § 60.49b(k)(2)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						these fuels, or a mixture of these fuels with any other fuels shall discharge SO ₂ in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 8 percent (0.08) of the potential SO ₂ emission rate (92 percent reduction) and 520 ng/J (1.2 lb/MMBtu) heat input.			§ 60.49b(k)(3) § 60.49b(k)(4) § 60.49b(k)(5) § 60.49b(k)(6) § 60.49b(k)(8) § 60.49b(k)(9) [G]§ 60.49b(n) § 60.49b(v) § 60.49b(w)
F-101	EU	60Db-02	PM	40 CFR Part 60, Subpart Db	§ 60.40b(a)	This subpart applies to each steam generating unit constructed, modified, or reconstructed after 6/19/84, and that has a heat input capacity from fuels combusted in the unit > 29 MW (100 MMBtu/hr).	None	[G]§ 60.49b(d) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3)
F-101	EU	60Db-02	PM (OPACITY)	40 CFR Part 60, Subpart Db	§ 60.40b(a)	This subpart applies to each steam generating unit constructed, modified, or reconstructed after 6/19/84, and that has a heat input capacity from fuels combusted in the unit > 29 MW (100 MMBtu/hr).	None	[G]§ 60.49b(d) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3)
F-101	EU	60Db-02	NO _x	40 CFR Part 60, Subpart Db	§ 60.44b(l)(1) § 60.44b(h) § 60.44b(i) § 60.46b(a)	Affected facilities combusting coal, oil, or natural gas, or a mixture of these fuels, or any other fuels: a limit of 86	§ 60.46b(c) § 60.46b(e) § 60.46b(e)(1) § 60.46b(e)(4) [G]§ 60.48b(b)	[G]§ 60.48b(b) § 60.48b(c) [G]§ 60.49b(d) [G]§ 60.49b(g) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3) § 60.49b(b) § 60.49b(h)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						ng/JI (0.20 lb/million Btu) heat input unless the affected facility meets the specified requirements.	§ 60.48b(c) § 60.48b(d) § 60.48b(e) [G]§ 60.48b(e)(2) § 60.48b(e)(3) § 60.48b(f) § 60.48b(g)(1)		§ 60.49b(h)(4) § 60.49b(i) § 60.49b(v) § 60.49b(w)
F-101	EU	60Ja-01	PM, NOX, SO2, CO	40 CFR Part 60, Subpart Ja	§ 60.100a(a) The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 60, Subpart Ja	The permit holder shall comply with the applicable requirements of 40 CFR Part 60, Subpart Ja	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 60, Subpart Ja	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 60, Subpart Ja	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 60, Subpart Ja
F-101	EU	63DDDDDD-01	112(B) HAPS	40 CFR Part 63, Subpart DDDDD	§ 63.7505 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart DDDDD	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart DDDDD	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart DDDDD	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart DDDDD	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart DDDDD
F-201	EU	R7310-01	NO _x	30 TAC Chapter 117, Subchapter B	§ 117.310(d)(3) § 117.310(a) § 117.310(a)(8)(A)(i) § 117.310(b) [G]§ 117.310(e)(1) § 117.310(e)(2) [G]§ 117.310(e)(3) § 117.310(e)(4) § 117.340(f)(1) § 117.340(l)(2)	An owner or operator may not use the alternative methods specified in §§ 117.315, 117.323 and 117.9800 to comply with the NO _x emission specifications but shall use the mass emissions cap and trade program in Chapter 101,	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(c) § 117.335(d) § 117.335(f) § 117.335(f)(2) § 117.335(g) § 117.340(a) § 117.340(c)(1)	§ 117.345(a) § 117.345(f) § 117.345(f)(1) [G]§ 117.345(f)(2) § 117.345(f)(8) § 117.345(f)(9) § 117.8100(a)(5)(C)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.345(d) § 117.345(d)(3) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 117.340(p)(1) § 117.340(p)(3)	Subchapter H, Division 3, except that electric generating facilities must also comply with the daily and 30-day system cap emission limitations of § 117.320. An owner or operator may use the alternative methods specified in § 117.9800 to comply with § 117.320.	[G]§ 117.340(c)(3) [G]§ 117.340(f)(2) § 117.340(l)(2) § 117.340(o)(1) § 117.340(p)(1) § 117.8100(a) § 117.8100(a)(1) § 117.8100(a)(1)(A) § 117.8100(a)(1)(B) § 117.8100(a)(1)(B)(i) § 117.8100(a)(1)(B)(ii) § 117.8100(a)(1)(C) § 117.8100(a)(2) [G]§ 117.8100(a)(3) § 117.8100(a)(4) § 117.8100(a)(5) § 117.8100(a)(5)(A) § 117.8100(a)(5)(B) [G]§ 117.8100(a)(5)(D) [G]§ 117.8100(a)(5)(E) § 117.8100(a)(6)		§ 117.8010(2)(B) § 117.8010(2)(C) § 117.8010(2)(D) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8) § 117.8100(c)
F-201	EU	R7310-01	CO	30 TAC Chapter 117, Subchapter B	§ 117.310(c)(1) § 117.310(c)(1)(A) § 117.310(c)(3) § 117.340(f)(1)	CO emissions must not exceed 400 ppmv at 3.0% O ₂ , dry basis.	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(c) § 117.335(d) § 117.335(f) § 117.335(f)(3) § 117.335(g) § 117.340(a) § 117.340(e) [G]§ 117.340(f)(2) § 117.8100(a) § 117.8100(a)(1) § 117.8100(a)(1)(A) § 117.8100(a)(1)(B) § 117.8100(a)(1)(B)(ii) § 117.8100(a)(1)(B)(iii) § 117.8100(a)(1)(C)	§ 117.345(a) § 117.345(f) § 117.345(f)(1) [G]§ 117.345(f)(2) § 117.345(f)(7) § 117.345(f)(8) § 117.345(f)(9) § 117.8100(a)(5)(C)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.345(d) § 117.345(d)(2) § 117.345(d)(3) § 117.345(d)(4) § 117.345(d)(5) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
							§ 117.8100(a)(2) [G]§ 117.8100(a)(3) § 117.8100(a)(4) § 117.8100(a)(5) § 117.8100(a)(5)(A) § 117.8100(a)(5)(B) [G]§ 117.8100(a)(5)(D) [G]§ 117.8100(a)(5)(E) § 117.8100(a)(6) § 117.8120 § 117.8120(1) § 117.8120(1)(A)		[G]§ 117.8010(7) [G]§ 117.8010(8) § 117.8100(c)
F-201	EU	R7310-01	NH ₃	30 TAC Chapter 117, Subchapter B	§ 117.310(c)(2) § 117.310(c)(2)(A)	For process heaters that inject urea or ammonia into the exhaust stream for NO _x control, ammonia emissions must not exceed 10 ppmv at 3.0% O ₂ , dry.	§ 117.335(a)(2) § 117.335(a)(4) § 117.335(b) § 117.335(d) § 117.335(e) § 117.335(g) § 117.340(d) § 117.8000(b) § 117.8000(c) § 117.8000(c)(3) § 117.8000(c)(4) § 117.8000(c)(5) § 117.8000(c)(6) [G]§ 117.8000(d) § 117.8130 § 117.8130(1)	§ 117.345(a) § 117.345(f) § 117.345(f)(11) § 117.345(f)(9)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8)
F-201	EU	R7310-02	NO _x	30 TAC Chapter 117, Subchapter B	§ 117.310(d)(3) § 117.310(a) § 117.310(a)(8)(A)(i) § 117.310(b) [G]§ 117.310(e)(1) § 117.310(e)(2) [G]§ 117.310(e)(3) § 117.310(e)(4) § 117.340(f)(1) § 117.340(l)(2)	An owner or operator may not use the alternative methods specified in §§ 117.315, 117.323 and 117.9800 to comply with the NO _x emission specifications but shall use the mass emissions cap and trade program in Chapter 101,	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(c) § 117.335(d) § 117.335(f) § 117.335(f)(2) § 117.335(g) § 117.340(a) § 117.340(c)(1)	§ 117.345(a) § 117.345(f) § 117.345(f)(1) [G]§ 117.345(f)(2) § 117.345(f)(8) § 117.345(f)(9) § 117.8100(a)(5)(C)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.345(d) § 117.345(d)(3) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 117.340(p)(1) § 117.340(p)(3)	Subchapter H, Division 3, except that electric generating facilities must also comply with the daily and 30-day system cap emission limitations of § 117.320. An owner or operator may use the alternative methods specified in § 117.9800 to comply with § 117.320.	[G]§ 117.340(c)(3) [G]§ 117.340(f)(2) § 117.340(l)(2) § 117.340(o)(1) § 117.340(p)(1) § 117.8100(a) § 117.8100(a)(1) § 117.8100(a)(1)(A) § 117.8100(a)(1)(B) § 117.8100(a)(1)(B)(i) § 117.8100(a)(1)(B)(ii) § 117.8100(a)(1)(C) § 117.8100(a)(2) [G]§ 117.8100(a)(3) § 117.8100(a)(4) § 117.8100(a)(5) § 117.8100(a)(5)(A) § 117.8100(a)(5)(B) [G]§ 117.8100(a)(5)(D) [G]§ 117.8100(a)(5)(E) § 117.8100(a)(6)		§ 117.8010(2)(B) § 117.8010(2)(C) § 117.8010(2)(D) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8) § 117.8100(c)
F-201	EU	R7310-02	CO	30 TAC Chapter 117, Subchapter B	§ 117.310(c)(1) § 117.310(c)(1)(A) § 117.310(c)(3) § 117.340(f)(1)	CO emissions must not exceed 400 ppmv at 3.0% O ₂ , dry basis.	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(c) § 117.335(d) § 117.335(f) § 117.335(f)(3) § 117.335(g) § 117.340(a) § 117.340(e) [G]§ 117.340(f)(2) § 117.8100(a) § 117.8100(a)(1) § 117.8100(a)(1)(A) § 117.8100(a)(1)(B) § 117.8100(a)(1)(B)(ii) § 117.8100(a)(1)(B)(iii) § 117.8100(a)(1)(C)	§ 117.345(a) § 117.345(f) § 117.345(f)(1) [G]§ 117.345(f)(2) § 117.345(f)(7) § 117.345(f)(8) § 117.345(f)(9) § 117.8100(a)(5)(C)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.345(d) § 117.345(d)(2) § 117.345(d)(3) § 117.345(d)(4) § 117.345(d)(5) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
							§ 117.8100(a)(2) [G]§ 117.8100(a)(3) § 117.8100(a)(4) § 117.8100(a)(5) § 117.8100(a)(5)(A) § 117.8100(a)(5)(B) [G]§ 117.8100(a)(5)(D) [G]§ 117.8100(a)(5)(E) § 117.8100(a)(6) § 117.8120 § 117.8120(1) § 117.8120(1)(A)		[G]§ 117.8010(7) [G]§ 117.8010(8) § 117.8100(c)
F-201	EU	R7310-02	NH ₃	30 TAC Chapter 117, Subchapter B	§ 117.310(c)(2) § 117.310(c)(2)(A)	For process heaters that inject urea or ammonia into the exhaust stream for NO _x control, ammonia emissions must not exceed 10 ppmv at 3.0% O ₂ , dry.	§ 117.335(a)(2) § 117.335(a)(4) § 117.335(b) § 117.335(d) § 117.335(e) § 117.335(g) § 117.340(d) § 117.8000(b) § 117.8000(c) § 117.8000(c)(3) § 117.8000(c)(4) § 117.8000(c)(5) § 117.8000(c)(6) [G]§ 117.8000(d) § 117.8130 § 117.8130(1)	§ 117.345(a) § 117.345(f) § 117.345(f)(11) § 117.345(f)(9)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8)
F-201	EU	60Db-01	SO ₂	40 CFR Part 60, Subpart Db	§ 60.42b(k)(1) § 60.42b(e) [G]§ 60.42b(f) § 60.42b(g) § 60.45b(a)	Except as provided in §60.42b(k)(2)-(4) on and after the §60.8 tests, no facility for which construction, reconstruction, or modification began after February 28, 2005, that combusts coal, oil, natural gas, a mixture of	§ 60.45b(b) § 60.45b(c) § 60.45b(c)(1) § 60.45b(f) § 60.45b(g) § 60.45b(h) [G]§ 60.47b(a) § 60.47b(c) § 60.47b(d) [G]§ 60.47b(e)	[G]§ 60.47b(a) [G]§ 60.49b(d) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3) § 60.49b(b) § 60.49b(j) § 60.49b(k) § 60.49b(k)(1) § 60.49b(k)(10) § 60.49b(k)(11) § 60.49b(k)(2)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						these fuels, or a mixture of these fuels with any other fuels shall discharge SO ₂ in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 8 percent (0.08) of the potential SO ₂ emission rate (92 percent reduction) and 520 ng/J (1.2 lb/MMBtu) heat input.			§ 60.49b(k)(3) § 60.49b(k)(4) § 60.49b(k)(5) § 60.49b(k)(6) § 60.49b(k)(8) § 60.49b(k)(9) [G]§ 60.49b(n) § 60.49b(v) § 60.49b(w)
F-201	EU	60Db-01	PM	40 CFR Part 60, Subpart Db	§ 60.40b(a)	This subpart applies to each steam generating unit constructed, modified, or reconstructed after 6/19/84, and that has a heat input capacity from fuels combusted in the unit > 29 MW (100 MMBtu/hr).	None	[G]§ 60.49b(d) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3)
F-201	EU	60Db-01	PM (OPACITY)	40 CFR Part 60, Subpart Db	§ 60.40b(a)	This subpart applies to each steam generating unit constructed, modified, or reconstructed after 6/19/84, and that has a heat input capacity from fuels combusted in the unit > 29 MW (100 MMBtu/hr).	None	[G]§ 60.49b(d) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3)
F-201	EU	60Db-01	NO _x	40 CFR Part 60, Subpart Db	§ 60.44b(l)(1) § 60.44b(h) § 60.44b(i) § 60.46b(a)	Affected facilities combusting coal, oil, or natural gas, or a mixture of these fuels, or any other fuels: a limit of 86	§ 60.46b(c) § 60.46b(e) § 60.46b(e)(1) § 60.46b(e)(4) [G]§ 60.48b(b)	[G]§ 60.48b(b) § 60.48b(c) [G]§ 60.49b(d) [G]§ 60.49b(g) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3) § 60.49b(b) § 60.49b(h)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						ng/JI (0.20 lb/million Btu) heat input unless the affected facility meets the specified requirements.	§ 60.48b(c) § 60.48b(d) § 60.48b(e) [G]§ 60.48b(e)(2) § 60.48b(e)(3) § 60.48b(f) § 60.48b(g)(1)		§ 60.49b(h)(4) § 60.49b(i) § 60.49b(v) § 60.49b(w)
F-201	EU	60Db-02	SO ₂	40 CFR Part 60, Subpart Db	§ 60.42b(k)(1) § 60.42b(e) [G]§ 60.42b(f) § 60.42b(g) § 60.45b(a)	Except as provided in §60.42b(k)(2)-(4) on and after the §60.8 tests, no facility for which construction, reconstruction, or modification began after February 28, 2005, that combusts coal, oil, natural gas, a mixture of these fuels, or a mixture of these fuels with any other fuels shall discharge SO ₂ in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 8 percent (0.08) of the potential SO ₂ emission rate (92 percent reduction) and 520 ng/J (1.2 lb/MMBtu) heat input.	§ 60.45b(b) § 60.45b(c) § 60.45b(c)(1) § 60.45b(f) § 60.45b(g) § 60.45b(h) [G]§ 60.47b(a) § 60.47b(c) § 60.47b(d) [G]§ 60.47b(e)	[G]§ 60.47b(a) [G]§ 60.49b(d) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3) § 60.49b(b) § 60.49b(j) § 60.49b(k) § 60.49b(k)(1) § 60.49b(k)(10) § 60.49b(k)(11) § 60.49b(k)(2) § 60.49b(k)(3) § 60.49b(k)(4) § 60.49b(k)(5) § 60.49b(k)(6) § 60.49b(k)(8) § 60.49b(k)(9) [G]§ 60.49b(n) § 60.49b(v) § 60.49b(w)
F-201	EU	60Db-02	PM	40 CFR Part 60, Subpart Db	§ 60.40b(a)	This subpart applies to each steam generating unit constructed, modified, or reconstructed after 6/19/84, and that has a heat input capacity from fuels combusted in the unit > 29 MW (100	None	[G]§ 60.49b(d) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						MMBtu/hr).			
F-201	EU	60Db-02	PM (OPACITY)	40 CFR Part 60, Subpart Db	§ 60.40b(a)	This subpart applies to each steam generating unit constructed, modified, or reconstructed after 6/19/84, and that has a heat input capacity from fuels combusted in the unit > 29 MW (100 MMBtu/hr).	None	[G]§ 60.49b(d) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3)
F-201	EU	60Db-02	NO _x	40 CFR Part 60, Subpart Db	§ 60.44b(l)(1) § 60.44b(h) § 60.44b(i) § 60.46b(a)	Affected facilities combusting coal, oil, or natural gas, or a mixture of these fuels, or any other fuels: a limit of 86 ng/JI (0.20 lb/million Btu) heat input unless the affected facility meets the specified requirements.	§ 60.46b(c) § 60.46b(e) § 60.46b(e)(1) § 60.46b(e)(4) [G]§ 60.48b(b) § 60.48b(c) § 60.48b(d) § 60.48b(e) [G]§ 60.48b(e)(2) § 60.48b(e)(3) § 60.48b(f) § 60.48b(g)(1)	[G]§ 60.48b(b) § 60.48b(c) [G]§ 60.49b(d) [G]§ 60.49b(g) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3) § 60.49b(b) § 60.49b(h) § 60.49b(h)(4) § 60.49b(i) § 60.49b(v) § 60.49b(w)
F-201	EU	60Ja-01	PM, NO _x , SO ₂ , CO	40 CFR Part 60, Subpart Ja	§ 60.100a(a) The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 60, Subpart Ja	The permit holder shall comply with the applicable requirements of 40 CFR Part 60, Subpart Ja	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 60, Subpart Ja	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 60, Subpart Ja	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 60, Subpart Ja
F-201	EU	63DDDDDD-01	112(B) HAPS	40 CFR Part 63, Subpart DDDDD	§ 63.7505 The permit holder shall comply with	The permit holder shall comply with the applicable requirements	The permit holder shall comply with the applicable monitoring	The permit holder shall comply with the applicable	The permit holder shall comply with the applicable reporting

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart DDDDD	of 40 CFR Part 63, Subpart DDDDD	and testing requirements of 40 CFR Part 63, Subpart DDDDD	recordkeeping requirements of 40 CFR Part 63, Subpart DDDDD	requirements of 40 CFR Part 63, Subpart DDDDD
FL-101	EU	R1111-01	PM (OPACITY)	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(4)(A)	Visible emissions from a process gas flare shall not be permitted for more than five minutes in any two-hour period, except for emission event emissions as provided in §101.222(b).	§ 111.111(a)(4)(A)(i) § 111.111(a)(4)(A)(ii)	§ 111.111(a)(4)(A)(ii)	None
FL-101	CD	60A-01	OPACITY	40 CFR Part 60, Subpart A	§ 60.18(b) § 60.18(c)(1) § 60.18(c)(2) § 60.18(c)(3)(ii) § 60.18(c)(5) § 60.18(c)(6) § 60.18(e)	Flares shall comply with paragraphs (c)-(f) of § 60.18.	§ 60.18(d) § 60.18(f)(1) § 60.18(f)(2) § 60.18(f)(3) § 60.18(f)(6)	None	None
FL-101	EU	60Ja-02	PM, NOX, SO2, CO	40 CFR Part 60, Subpart Ja	§ 60.100a(a) The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 60, Subpart Ja	The permit holder shall comply with the applicable requirements of 40 CFR Part 60, Subpart Ja	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 60, Subpart Ja	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 60, Subpart Ja	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 60, Subpart Ja
FUG	EU	R5352-01	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(10)	Instrumentation systems, as defined in 40 CFR §63.161 (January 17, 1997), that meet 40	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						CFR §63.169 (June 20, 1996) are exempt from the requirements of this division except §115.356(3)(C) of this title.			
FUG	EU	R5352-01	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(11)	Sampling connection systems, as defined in 40 CFR §63.161 (January 17, 1997), that meet the requirements of 40 CFR §63.166(a) and (b) (June 20, 1996) are exempt from the requirements of this division except §115.356(3)(C) of this title.	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
FUG	EU	R5352-01	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(2) § 115.352(9)	Each pressure relief valve equipped with a rupture disk must comply with §115.352(9) and §115.356(3)(C).	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
FUG	EU	R5352-01	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(3) § 115.352(7) § 115.357(1)	No process drains shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
FUG	EU	R5352-01	VOC	30 TAC Chapter	§ 115.352(1)(A)	No process drains shall	§ 115.354(1)	§ 115.352(7)	None

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
				115, Pet. Refinery & Petrochemicals	§ 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(3) § 115.352(7)	be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(10) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355	§ 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) § 115.356(5)	
FUG	EU	R5352-01	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(9) § 115.357(1) § 115.357(8) § 115.357(9)	No pressure relief valves shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(2) § 115.354(4) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)
FUG	EU	R5352-01	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(9) § 115.357(12) § 115.357(8)	No pressure relief valves shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(4) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.357(9)	based on sight, smell, or sound.			
FUG	EU	R5352-01	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(1) § 115.357(8) § 115.357(9)	No open-ended valves or lines shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(2) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)
FUG	EU	R5352-01	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(12) § 115.357(8) § 115.357(9)	No open-ended valves or lines shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)
FUG	EU	R5352-01	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3)	No valves shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts	§ 115.354(1) § 115.354(2) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(1) § 115.357(8) § 115.357(9)	per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.357(1)		
FUG	EU	R5352-01	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(12) § 115.357(8) § 115.357(9)	No valves shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)
FUG	EU	R5352-01	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(8) § 115.357(1) § 115.357(12) § 115.357(8)	No flanges or other connectors shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(11) § 115.354(3) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
FUG	EU	R5352-01	VOC	30 TAC Chapter 115, Pet. Refinery	§ 115.352(1)(A) § 115.352(1)	No flanges or other connectors shall be	§ 115.354(1) § 115.354(10)	§ 115.352(7) § 115.354(10)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
				& Petrochemicals	§ 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(8) § 115.357(12) § 115.357(8)	allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(11) § 115.354(3) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	
FUG	EU	R5352-01	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(4) § 115.357(8)	No compressor seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	[G]§ 115.355	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	None
FUG	EU	R5352-01	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7)	No compressor seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid	§ 115.354(1) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.357(1) § 115.357(8)	based on sight, smell, or sound.			
FUG	EU	R5352-01	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(12) § 115.357(8)	No compressor seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
FUG	EU	R5352-01	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(4) § 115.357(8)	No pump seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	[G]§ 115.355	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	None
FUG	EU	R5352-01	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(4) § 115.357(8)	No pump seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(1) § 115.357(8)	parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.			
FUG	EU	R5352-01	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(12) § 115.357(8)	No pump seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
FUG	EU	60GGGa-01	VOC	40 CFR Part 60, Subpart GGGa	[G]§ 60.590a(a) The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 60, Subpart GGGa	The permit holder shall comply with the applicable requirements of 40 CFR Part 60, Subpart GGGa	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 60, Subpart GGGa	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 60, Subpart GGGa	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 60, Subpart GGGa
FUG	EU	63EEEE-01	112(B) HAPS	40 CFR Part 63, Subpart EEEE	§ 63.2338(b) The permit holder shall comply with the applicable limitation, standard and/or equipment	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart EEEE	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart EEEE	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart EEEE

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					specification requirements of 40 CFR Part 63, Subpart EEEE		EEEE		
MISC-ADH	PRO	R5471-01	VOC	30 TAC Chapter 115, Subchapter E, Division 7	§ 115.471(a) [G]§ 115.473(d)	The owner or operator of application processes located on a property with actual combined emissions of volatile organic compounds (VOC) < 3.0 tons per calendar year, when uncontrolled, from all adhesives, adhesive primers, and solvents used during related cleaning operations, is exempt from the requirements of this division, except as specified in §115.478(b)(2). When calculating the VOC emissions, adhesives and adhesive primers that are exempt under subsections (b) and (c) are excluded.	None	§ 115.478(b)(2) § 115.478(b)(4)	None
TK-101	EU	63CC-02	112(B) HAPS	40 CFR Part 63, Subpart CC	§ 63.640(c)(2)	All Group 2 storage vessels associated with petroleum refining process units meeting the criteria in paragraph (a) of this section are part of the affected source.	§ 63.646(b)(1) § 63.646(b)(2)	§ 63.646(b)(1) § 63.655(g)(7)(ii) § 63.655(i)(1)(iv) § 63.655(i)(5)	§ 63.655(f) § 63.655(f)(1)(i)(A) § 63.655(g) § 63.655(g)(7) § 63.655(g)(7)(i) § 63.655(h) § 63.655(h)(6) § 63.655(h)(6)(ii)

Additional Monitoring Requirements

Periodic Monitoring Summary.....60

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: DEGREASER	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Degreasing Processes	SOP Index No.: R5412-01
Pollutant: VOC	Main Standard: § 115.412(1)
Monitoring Information	
Indicator: Visual Inspection	
Minimum Frequency: Monthly	
Averaging Period: n/a	
Deviation Limit: Monitoring data which indicates that the cold cleaner is not in compliance with the applicable requirements of 30 TAC 115.412(1)(A)-(F) shall be considered and reported as a deviation.	
Periodic Monitoring Text: Inspect equipment and record data monthly to ensure compliance with any applicable requirements in § 115.412(1)(A)-(F). Any monitoring data which indicates that the cold cleaner is not in compliance with the applicable requirements of § 115.412(1)(A)-(F) shall be considered and reported as a deviation.	

Permit Shield

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Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/ Inclusive Units		
100-11	N/A	40 CFR Part 60, Subpart Kb	Storage vessel has a capacity greater than or equal to 151 m3 and stores a liquid with maximum true vapor pressure less than 3.5 kPa.
100-11	N/A	40 CFR Part 63, Subpart EEEE	Unit is part of an affected source complying with another 40 CFR Part 63 subpart.
100-12	N/A	40 CFR Part 60, Subpart Kb	Storage vessel has a capacity greater than or equal to 151 m3 and stores a liquid with maximum true vapor pressure less than 3.5 kPa.
100-12	N/A	40 CFR Part 63, Subpart EEEE	Unit is part of an affected source complying with another 40 CFR Part 63 subpart.
100-13	N/A	40 CFR Part 60, Subpart Kb	A Group 1 storage vessel that is part of a new source and is subject to 40 CFR part 60, subpart Kb is required to comply only with 40 CFR part 63, subpart CC.
100-13	N/A	40 CFR Part 63, Subpart EEEE	Unit is part of an affected source complying with another 40 CFR Part 63 subpart.
100-14	N/A	40 CFR Part 60, Subpart Kb	A Group 1 storage vessel that is part of a new source and is subject to 40 CFR part 60, subpart Kb is required to comply only with 40 CFR part 63, subpart CC.
100-14	N/A	40 CFR Part 63, Subpart EEEE	Unit is part of an affected source complying with another 40 CFR Part 63 subpart.
100-15	N/A	40 CFR Part 60, Subpart Kb	A Group 1 storage vessel that is part of a new source and is subject to 40 CFR part 60, subpart Kb is required to comply only with 40 CFR part 63, subpart CC.

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/ Inclusive Units		
100-15	N/A	40 CFR Part 63, Subpart EEEE	Unit is part of an affected source complying with another 40 CFR Part 63 subpart.
100-20	N/A	40 CFR Part 60, Subpart Kb	Storage vessel has a capacity greater than or equal to 151 m3 and stores a liquid with maximum true vapor pressure less than 3.5 kPa.
100-20	N/A	40 CFR Part 63, Subpart EEEE	Unit is part of an affected source complying with another 40 CFR Part 63 subpart.
100-21	N/A	40 CFR Part 60, Subpart Kb	Storage vessel has a capacity greater than or equal to 151 m3 and stores a liquid with maximum true vapor pressure less than 3.5 kPa.
100-21	N/A	40 CFR Part 63, Subpart EEEE	Unit is part of an affected source complying with another 40 CFR Part 63 subpart.
120-22	N/A	40 CFR Part 60, Subpart Kb	Storage vessel has a capacity greater than or equal to 151 m3 and stores a liquid with maximum true vapor pressure less than 3.5 kPa.
120-22	N/A	40 CFR Part 63, Subpart EEEE	Unit is part of an affected source complying with another 40 CFR Part 63 subpart.
120-23	N/A	40 CFR Part 60, Subpart Kb	Storage vessel has a capacity greater than or equal to 151 m3 and stores a liquid with maximum true vapor pressure less than 3.5 kPa.
120-23	N/A	40 CFR Part 63, Subpart EEEE	Unit is part of an affected source complying with another 40 CFR Part 63 subpart.
120-24	N/A	40 CFR Part 60, Subpart Kb	A Group 1 storage vessel that is part of a new source and is subject to 40 CFR part 60, subpart Kb is required to comply only with 40 CFR

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/ Inclusive Units		
			part 63, subpart CC.
120-24	N/A	40 CFR Part 63, Subpart EEEE	Unit is part of an affected source complying with another 40 CFR Part 63 subpart.
120-25	N/A	40 CFR Part 60, Subpart Kb	A Group 1 storage vessel that is part of a new source and is subject to 40 CFR part 60, subpart Kb is required to comply only with 40 CFR part 63, subpart CC.
120-25	N/A	40 CFR Part 63, Subpart EEEE	Unit is part of an affected source complying with another 40 CFR Part 63 subpart.
150-10	N/A	40 CFR Part 60, Subpart Kb	Storage vessel has a capacity greater than or equal to 151 m3 and stores a liquid with maximum true vapor pressure less than 3.5 kPa.
150-10	N/A	40 CFR Part 63, Subpart EEEE	Unit is part of an affected source complying with another 40 CFR Part 63 subpart.
200-1	N/A	40 CFR Part 60, Subpart Kb	A Group 1 storage vessel that is part of a new source and is subject to 40 CFR part 60, subpart Kb is required to comply only with 40 CFR part 63, subpart CC.
200-1	N/A	40 CFR Part 63, Subpart EEEE	Unit is part of an affected source complying with another 40 CFR Part 63 subpart.
200-2	N/A	40 CFR Part 60, Subpart Kb	A Group 1 storage vessel that is part of a new source and is subject to 40 CFR part 60, subpart Kb is required to comply only with 40 CFR part 63, subpart CC.

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/ Inclusive Units		
200-2	N/A	40 CFR Part 63, Subpart EEEE	Unit is part of an affected source complying with another 40 CFR Part 63 subpart.
200-3	N/A	40 CFR Part 60, Subpart Kb	A Group 1 storage vessel that is part of a new source and is subject to 40 CFR part 60, subpart Kb is required to comply only with 40 CFR part 63, subpart CC.
200-3	N/A	40 CFR Part 63, Subpart EEEE	Unit is part of an affected source complying with another 40 CFR Part 63 subpart.
5-0	N/A	40 CFR Part 60, Subpart QQQ	Storage vessels, including slop oil tanks and other auxiliary tanks that are subject to the standards in §60.112b and associated requirements are not subject to the requirements of §60.692-3.
CHILLER	N/A	40 CFR Part 63, Subpart CC	The unit does not meet the definition of a heat exchange system because it does not use water to cool down the process stream.
FUG	N/A	40 CFR Part 63, Subpart CC	Equipment leaks that are also subject to the provisions of 40 CFR part 60, subpart GGGa, are required to comply only with the provisions specified in 40 CFR part 60, subpart GGGa.
TK-101	N/A	30 TAC Chapter 115, Storage of VOCs	Process tanks/vessels are not included in the definition of a storage tank.
TK-101	N/A	40 CFR Part 60, Subpart Kb	Process tanks/vessels are not included in the definition of a storage vessel.
TK-102	N/A	30 TAC Chapter 115, Storage of VOCs	Process tanks/vessels are not included in the definition of a storage tank.

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/ Inclusive Units		
TK-102	N/A	40 CFR Part 60, Subpart Kb	Process tanks/vessels are not included in the definition of a storage vessel.
TK-102	N/A	40 CFR Part 60, Subpart QQQ	The tank is part of a stormwater sewer system and is not subject to the requirements of 40 CFR part 60, subpart QQQ.
TK-102	N/A	40 CFR Part 63, Subpart CC	Emission point is associated with stormwater from segregated stormwater sewers.

New Source Review Authorization References

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New Source Review Authorization References by Emission Unit..... 69

New Source Review Authorization References

The New Source Review authorizations listed in the table below are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Nonattainment (NA) Permits	
NA Permit No.: N158	Issuance Date: 10/08/2014
Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.	
Authorization No.: 101199	Issuance Date: 10/08/2014
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 106.261	Version No./Date: 11/01/2003
Number: 106.262	Version No./Date: 11/01/2003
Number: 106.263	Version No./Date: 09/04/2000
Number: 106.263	Version No./Date: 11/01/2001
Number: 106.454	Version No./Date: 11/01/2001
Number: 106.472	Version No./Date: 09/04/2000
Number: 106.511	Version No./Date: 09/04/2000

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
100-11	TANK NO. 100-11	101199, N158
100-12	TANK NO. 100-12	101199, N158
100-13	TANK NO. 100-13	101199, N158
100-14	TANK NO. 100-14	101199, N158
100-15	TANK NO. 100-15	101199, N158
100-20	TANK NO. 100-20	101199, N158
100-21	TANK NO. 100-21	101199, N158
120-22	TANK NO. 120-22	101199, N158
120-23	TANK NO. 120-23	101199, N158
120-24	TANK NO. 120-24	101199, N158
120-25	TANK NO. 120-25	101199, N158
150-10	TANK NO. 150-10	101199, N158
200-1	TANK NO. 200-1	101199, N158
200-2	TANK NO. 200-2	101199, N158
200-3	TANK NO. 200-3	101199, N158
5-0	TANK NO. 5-0	101199, N158
CHILLER	CHILLER	106.261/11/01/2003
DEGREASER	DEGREASER	106.454/11/01/2001

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
EGEN-1	EMERGENCY GENERATOR	101199, N158
F-101	NAPHTHA SPLITTER REBOILER TRAIN I	101199, N158
F-201	NAPHTHA SPLITTER REBOILER TRAIN II	101199, N158
FL-101	FLARE NO. 101	101199, N158
FUG	FUGITIVES	101199, N158
MISC-ADH	MISCELLANEOUS ADHESIVES	106.263/11/01/2001
TK-101	TANK NO. 101	106.472/09/04/2000
TK-102	TANK NO. 102	106.472/09/04/2000

Appendix A

Acronym List	72
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Acronym List

The following abbreviations or acronyms may be used in this permit:

ACFM	actual cubic feet per minute
AMOC	alternate means of control
ARP	Acid Rain Program
ASTM	American Society of Testing and Materials
B/PA	Beaumont/Port Arthur (nonattainment area)
CAM	Compliance Assurance Monitoring
CD	control device
COMS	continuous opacity monitoring system
CVS	closed-vent system
D/FW	Dallas/Fort Worth (nonattainment area)
DR	Designated Representative
ELP	El Paso (nonattainment area)
EP	emission point
EPA	U.S. Environmental Protection Agency
EU	emission unit
FCAA Amendments	Federal Clean Air Act Amendments
FOP	federal operating permit
GF	grandfathered
gr/100 scf	grains per 100 standard cubic feet
HAP	hazardous air pollutant
H/G/B	Houston/Galveston/Brazoria (nonattainment area)
H ₂ S	hydrogen sulfide
ID No.	identification number
lb/hr	pound(s) per hour
MMBtu/hr	Million British thermal units per hour
MRRT	monitoring, recordkeeping, reporting, and testing
NA	nonattainment
N/A	not applicable
NADB	National Allowance Data Base
NO _x	nitrogen oxides
NSPS	New Source Performance Standard (40 CFR Part 60)
NSR	New Source Review
ORIS	Office of Regulatory Information Systems
Pb	lead
PBR	Permit By Rule
PM	particulate matter
ppmv	parts per million by volume
PSD	prevention of significant deterioration
RO	Responsible Official
SO ₂	sulfur dioxide
TCEQ	Texas Commission on Environmental Quality
TSP	total suspended particulate
TVP	true vapor pressure
U.S.C.	United States Code
VOC	volatile organic compound

Appendix B

Major NSR Summary Table..... 74

Major NSR Summary Table

Permit Number: 101199 and N158			Issuance Date: October 8, 2014				
Emission Point Number ⁽¹⁾ (EPN)	Source Name ⁽²⁾	Air Contaminant Name ⁽³⁾	Emission Rates *		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	(TPY) ⁽⁴⁾	Spec. Cond.	Spec. Cond.	Spec. Cond.
F-101	Naphtha Splitter Reboiler Train I	CO	9.13	—	3, 4, 9, 10, 11, 31	3, 4, 10, 11, 31	3, 4, 10, 30, 31
		CO ⁽⁶⁾	14.78	—			
		NO _x	2.47	—			
		NO _x ⁽⁶⁾	5.00	—			
		VOC	1.33	—			
		SO ₂	1.48	—			
		PM	1.11	—			
		PM ₁₀	1.11	—			
		PM _{2.5}	1.11	—			
		Ammonia	1.83	—			
F-201	Naphtha Splitter Reboiler Train II	CO	9.13	—	3, 4, 9, 10, 11, 31	3, 4, 10, 11, 31	3, 4, 10, 30, 31
		CO ⁽⁶⁾	14.78	—			
		NO _x	2.47	—			
		NO _x ⁽⁶⁾	5.00	—			
		VOC	1.33	—			
		SO ₂	1.48	—			
		PM	1.11	—			
		PM ₁₀	1.11	—			
		PM _{2.5}	1.11	—			
		Ammonia	1.83	—			
F-101 F-201	Heater Annual Emission Cap	CO	—	72.84			
		NO _x	—	11.83			
		VOC	—	10.63			
		SO ₂	—	11.83			
		PM	—	8.87			
		PM ₁₀	—	8.87			
		PM _{2.5}	—	8.87			
		Ammonia	—	14.57			
FL-101	Flare No. 101	CO	0.63	2.75	3, 4, 12	3, 4, 12	4
		NO _x	0.16	0.69			
		VOC	0.03	0.12			
		SO ₂	0.00	0.00			
200-1	Tank No. 200-1	VOC	2.27	4.59	17	17, 18, 20	
200-2	Tank No. 200-2	VOC	2.27	4.59	17	17, 18, 20	
200-3	Tank No. 200-3	VOC	2.27	4.59	17	17, 18, 20	
100-20	Tank No. 100-20	VOC	0.80	0.20	17	17, 18, 20	
150-10	Tank No. 150-10	VOC	0.78	0.68	17	17, 18, 20	

Major NSR Summary Table

Permit Number: 101199 and N158			Issuance Date: October 8, 2014				
Emission Point Number ⁽¹⁾ (EPN)	Source Name ⁽²⁾	Air Contaminant Name ⁽³⁾	Emission Rates *		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	(TPY) ⁽⁴⁾	Spec. Cond.	Spec. Cond.	Spec. Cond.
120-24	Tank No. 120-24	VOC	1.24	2.67	17	17, 18, 20	
100-21	Tank No. 100-21	VOC	0.88	0.20	17	17, 18, 20	
100-11	Tank No. 100-11	VOC	0.88	0.20	17	17, 18, 20	
100-14	Tank No. 100-14	VOC	1.22	1.79	17	17, 18, 20	
5-0	Tank No. 5-0	VOC	1.30	0.90	4, 17	4, 17, 18, 20	4
120-22	Tank No. 120-22	VOC	0.91	0.59	17	17, 18, 20	
100-12	Tank No. 100-12	VOC	0.88	0.20	17	17, 18, 20	
120-25	Tank No. 120-25	VOC	1.24	2.67	17	17, 18, 20	
100-13	Tank No. 100-13	VOC	1.22	0.32	17	17, 18, 20	
120-23	Tank No. 120-23	VOC	0.91	0.59	17	17, 18, 20	
100-15	Tank No. 100-15	VOC	1.22	1.79	17	17, 18, 20	
FUG	Process Fugitive Components ⁽⁵⁾	VOC	1.74	7.60	4, 13, 14, 15	4, 13, 15	4, 13
MAR-LOADFUG	Marine Loading Fugitives Emissions Cap	VOC	141.96	6.70	6, 22, 23, 25, 26	6, 22, 23, 25, 26, 28	6, 25
MAR-VCU	Marine Loading VCU Emission Caps	CO NO _x VOC SO ₂ PM PM ₁₀ PM _{2.5}	6.91 5.18 8.59 0.05 0.64 0.64 0.64	3.40 2.55 3.39 0.03 0.32 0.32 0.32	3, 26, 27, 31	3, 27, 28, 31	26, 30, 31
EGEN-1	Emergency Generator	CO NO _x VOC SO ₂ PM PM ₁₀ PM _{2.5}	12.90 6.23 2.02 5.79 0.37 0.37 0.37	3.22 1.56 0.50 1.45 0.09 0.09 0.09	4, 6	4, 6	4, 6

Major NSR Summary Table

Permit Number: 101199 and N158			Issuance Date: October 8, 2014				
Emission Point Number ⁽¹⁾ (EPN)	Source Name ⁽²⁾	Air Contaminant Name ⁽³⁾	Emission Rates *		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	(TPY) ⁽⁴⁾	Spec. Cond.	Spec. Cond.	Spec. Cond.
MSS	MSS Activities	VOC NO _x CO SO ₂ PM PM ₁₀ PM _{2.5}	382.50 37.20 131.39 2.42 2.23 2.23 2.23	3.25 0.46 1.35 0.01 0.08 0.08 0.08	35, 36, 37, 40, 43	34, 35, 36, 37, 40, 41, 43	
All	All authorized by permit	Benzene	—	0.30			

Footnotes:

(1) Emission point identification - either specific equipment designation or emission point number from plot plan.

(2) Specific point source name. For fugitive sources, use area name or fugitive source name.

(3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1

NO_x - total oxides of nitrogen

SO₂ - sulfur dioxide

PM - total particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}, as represented

PM₁₀- total particulate matter, suspended in the atmosphere, equal to or less than 10 microns in diameter, including PM_{2.5}, as represented

PM_{2.5}- particulate matter equal to or less than 2.5 microns in diameter

CO - carbon monoxide

(4) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period.

(5) Process component fugitive emissions and marine loading fugitive emissions from leak checked vessels are estimates and are enforceable through compliance with the applicable special condition(s) and permit application representations.

(6) Rates apply to planned startup periods as specified in Special Condition 34.



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
AIR QUALITY PERMIT



A Permit Is Hereby Issued To
Kinder Morgan Crude & Condensate LLC
Authorizing the Construction and Operation of
Galena Park Terminal Condensate Splitter
Located at Galena Park, Harris County, Texas
Latitude 29° 43' 30" Longitude -95° 14' 45"

Permits: 101199 and N158

Amendment Date : October 8, 2014

Renewal Date: June 12, 2023

For the Commission

1. **Facilities** covered by this permit shall be constructed and operated as specified in the application for the permit. All representations regarding construction plans and operation procedures contained in the permit application shall be conditions upon which the permit is issued. Variations from these representations shall be unlawful unless the permit holder first makes application to the Texas Commission on Environmental Quality (commission) Executive Director to amend this permit in that regard and such amendment is approved. [Title 30 Texas Administrative Code 116.116 (30 TAC 116.116)]
2. **Voiding of Permit.** A permit or permit amendment is automatically void if the holder fails to begin construction within 18 months of the date of issuance, discontinues construction for more than 18 months prior to completion, or fails to complete construction within a reasonable time. Upon request, the executive director may grant an 18-month extension. Before the extension is granted the permit may be subject to revision based on best available control technology, lowest achievable emission rate, and netting or offsets as applicable. One additional extension of up to 18 months may be granted if the permit holder demonstrates that emissions from the facility will comply with all rules and regulations of the commission, the intent of the Texas Clean Air Act (TCAA), including protection of the public's health and physical property; and (b)(1) the permit holder is a party to litigation not of the permit holder's initiation regarding the issuance of the permit; or (b)(2) the permit holder has spent, or committed to spend, at least 10 percent of the estimated total cost of the project up to a maximum of \$5 million. A permit holder granted an extension under subsection (b)(1) of this section may receive one subsequent extension if the permit holder meets the conditions of subsection (b)(2) of this section. [30 TAC 116.120(a), (b) and (c)]
3. **Construction Progress.** Start of construction, construction interruptions exceeding 45 days, and completion of construction shall be reported to the appropriate regional office of the commission not later than 15 working days after occurrence of the event. [30 TAC 116.115(b)(2)(A)]
4. **Start-up Notification.** The appropriate air program regional office shall be notified prior to the commencement of operations of the facilities authorized by the permit in such a manner that a representative of the commission may be present. The permit holder shall provide a separate notification for the commencement of operations for each unit of phased construction, which may involve a series of units commencing operations at different times. Prior to operation of the facilities authorized by the permit, the permit holder shall identify the source or sources of allowances to be utilized for compliance with Chapter 101, Subchapter H, Division 3 of this title (relating to Mass Emissions Cap and Trade Program). [30 TAC 116.115(b)(2)(B)(iii)]
5. **Sampling Requirements.** If sampling is required, the permit holder shall contact the commission's Office of Compliance and Enforcement prior to sampling to obtain the proper data forms and procedures. All sampling and testing procedures must be approved by the executive director and coordinated with the regional representatives of the commission. The permit holder is also responsible for providing sampling facilities and conducting the sampling operations or contracting with an independent sampling consultant. [30 TAC 116.115(b)(2)(C)]

6. **Equivalency of Methods.** The permit holder must demonstrate or otherwise justify the equivalency of emission control methods, sampling or other emission testing methods, and monitoring methods proposed as alternatives to methods indicated in the conditions of the permit. Alternative methods shall be applied for in writing and must be reviewed and approved by the executive director prior to their use in fulfilling any requirements of the permit. [30 TAC 116.115(b)(2)(D)]
7. **Recordkeeping.** The permit holder shall maintain a copy of the permit along with records containing the information and data sufficient to demonstrate compliance with the permit, including production records and operating hours; keep all required records in a file at the plant site. If, however, the facility normally operates unattended, records shall be maintained at the nearest staffed location within Texas specified in the application; make the records available at the request of personnel from the commission or any air pollution control program having jurisdiction; comply with any additional recordkeeping requirements specified in special conditions attached to the permit; and retain information in the file for at least two years following the date that the information or data is obtained. [30 TAC 116.115(b)(2)(E)]
8. **Maximum Allowable Emission Rates.** The total emissions of air contaminants from any of the sources of emissions must not exceed the values stated on the table attached to the permit entitled "Emission Sources--Maximum Allowable Emission Rates." [30 TAC 116.115(b)(2)(F)]
9. **Maintenance of Emission Control.** The permitted facilities shall not be operated unless all air pollution emission capture and abatement equipment is maintained in good working order and operating properly during normal facility operations. The permit holder shall provide notification for upsets and maintenance in accordance with 30 TAC 101.201, 101.211, and 101.221 of this title (relating to Emissions Event Reporting and Recordkeeping Requirements; Scheduled Maintenance, Startup, and Shutdown Reporting and Recordkeeping Requirements; and Operational Requirements). [30 TAC 116.115(b)(2)(G)]
10. **Compliance with Rules.** Acceptance of a permit by an applicant constitutes an acknowledgment and agreement that the permit holder will comply with all rules, regulations, and orders of the commission issued in conformity with the TCAA and the conditions precedent to the granting of the permit. If more than one state or federal rule or regulation or permit condition is applicable, the most stringent limit or condition shall govern and be the standard by which compliance shall be demonstrated. Acceptance includes consent to the entrance of commission employees and agents into the permitted premises at reasonable times to investigate conditions relating to the emission or concentration of air contaminants, including compliance with the permit. [30 TAC 116.115(b)(2)(H)]
11. **This** permit may not be transferred, assigned, or conveyed by the holder except as provided by rule. [30 TAC 116.110(e)]
12. **There** may be additional special conditions attached to a permit upon issuance or modification of the permit. Such conditions in a permit may be more restrictive than the requirements of Title 30 of the Texas Administrative Code. [30 TAC 116.115(c)]
13. **Emissions** from this facility must not cause or contribute to a condition of "air pollution" as defined in Texas Health and Safety Code (THSC) 382.003(3) or violate THSC 382.085. If the executive director determines that such a condition or violation occurs, the holder shall implement additional abatement measures as necessary to control or prevent the condition or violation.
14. **The** permit holder shall comply with all the requirements of this permit. Emissions that exceed the limits of this permit are not authorized and are violations of this permit.

Special Conditions

Permit Numbers 101199 and N158

1. This permit authorizes emissions only from those points listed in the attached table entitled “Emission Sources — Maximum Allowable Emission Rates” (MAERT) and the facilities covered by this permit are authorized to emit subject to the emission rate limits on that table and other operating requirements specified in the special conditions.
2. Non-fugitive emissions from relief valves, safety valves, or rupture discs of gases containing volatile organic compounds (VOC) or ammonia at a concentration of greater than 1 percent are not authorized by this permit. Any releases directly to atmosphere from relief valves, safety valves, or rupture discs of gases containing VOC or ammonia at a concentration greater than 1 weight percent are not consistent with good practice for minimizing emissions with the exception of those on floating or fixed roof storage tanks.
3. The following requirements apply to capture systems for the heater selective catalytic reduction (SCR) systems, flare, and marine loading vapor combustion unit.
 - A. Conduct a once a month visual, audible, and/or olfactory inspection of the capture system to verify there are no leaking components in the capture system; or once a year, verify the capture system is leak-free by inspecting in accordance with 40 CFR Part 60, Appendix A, Test Method 21. Leaks shall be indicated by an instrument reading greater than or equal to 500 ppmv above background.
 - B. If there is a bypass for the control device, comply with either of the following requirements :
 - (1) Install a flow indicator that records and verifies zero flow at least once every fifteen minutes immediately downstream of each valve that if opened would allow a vent stream to bypass the control device and be emitted, either directly or indirectly, to the atmosphere; or
 - (2) Once a month, inspect the valves, verifying that the position of the valves and the condition of the car seals prevent flow out of the bypass.A deviation shall be reported if the monitoring or inspections indicate bypass of the control device.
 - C. The date and results of each inspection performed shall be recorded. If the results of any inspection are not satisfactory, the deficiencies shall be recorded and the permit holder shall promptly take necessary corrective action, recording each action with the date completed.

Federal Applicability

4. These facilities shall comply with all applicable requirements of the U.S. Environmental Protection Agency (EPA) regulations on Standards of Performance for New Stationary Sources promulgated in Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60):
(10/14)
 - A. Subpart A, General Provisions.

- B. Subpart Ja, Petroleum Refineries for which Construction, Reconstruction, or Modification Commenced after May 14, 2007.
 - C. Subpart Kb, Volatile Organic Liquid Storage Vessels for which Construction, Reconstruction, or Modification Commenced after July 23, 1984.
 - D. Subpart QQQ, VOC Emissions from Petroleum Refinery Wastewater Systems.
 - E. Subpart GGGa, Equipment Leaks of VOC in Petroleum Refineries for which Construction, Reconstruction, or Modification Commenced after November 7, 2006.
5. These facilities shall comply with all applicable requirements of the U.S. Environmental Protection Agency (EPA) regulations on National Emission Standards for Hazardous Air Pollutants in 40 CFR Part 61: **(10/14)**
- A. Subpart A, General Provisions.
 - B. Subpart FF, Benzene Waste Operations.
6. These facilities shall comply with all applicable requirements of the U.S. Environmental Protection Agency (EPA) regulations on National Emission Standards for Hazardous Air Pollutants for Source Categories in 40 CFR Part 63: **(10/14)**
- A. Subpart A, General Provisions.
 - B. Subpart R, Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations).
 - C. Subpart Y, Marine Tank Vessel Loading Operations.
 - D. Subpart CC, Petroleum Refineries.
 - E. Subpart DDDDD, Industrial, Commercial, and Institutional Boilers and Process Heaters.
7. If any condition of this permit is more stringent than the applicable regulations in Special Condition Nos. 4, 5, and 6, then for the purposes of complying with this permit, the permit shall govern and be the standard by which compliance shall be demonstrated.

Heaters and Flare

8. Nitrogen oxides (NO_x), carbon monoxide (CO), and ammonia emissions from each heater (Emission Point Numbers [EPNs] F-101 and F-201) shall not exceed the following rates/concentrations (ppmv is corrected to 3 percent oxygen).

Pollutant	Hourly Average	Rolling 12 Month Average
NO _x	0.01 lb/MMBtu	0.006 lb/MMBtu
CO	50 ppmv	n/a
Ammonia	10 ppmv	n/a

9. Combustion units shall be fired with fuel gas containing no more than 2.2 grains of total sulfur per 100 dry standard cubic feet (dscf). Fuel gas shall consist of natural gas and uncondensed off-gas not to exceed 1% of total fuel gas usage. The natural gas shall be sampled every 6 months to determine total sulfur and net heating value. Test results from the fuel supplier may be used to satisfy this requirement. **(10/14)**
10. The permit holder shall install, calibrate, and maintain a continuous emission monitoring system (CEMS) to measure and record the in-stack concentration of CO, NO_x, and oxygen from the heaters (EPNs F-101 and F-201).
 - A. The CEMS shall meet the design and performance specifications, pass the field tests, and meet the installation requirements and the data analysis and reporting requirements specified in the applicable Performance Specification Nos. 1 through 9, Title 40 Code of Federal Regulation Part 60 (40 CFR Part 60), Appendix B. If there are no applicable performance specifications in 40 CFR Part 60, Appendix B, contact the TCEQ Office of Air, Air Permits Division for requirements to be met.
 - B. Section 1 below applies to sources subject to the quality-assurance requirements of 40 CFR Part 60, Appendix F; section 2 applies to all other sources:
 - (1) The permit holder shall assure that the CEMS meets the applicable quality-assurance requirements specified in 40 CFR Part 60, Appendix F, Procedure 1. Relative accuracy exceedances, as specified in 40 CFR Part 60, Appendix F, Section 5.2.3 and any CEMS downtime shall be reported to the appropriate TCEQ Regional Manager, and necessary corrective action shall be taken. Supplemental stack concentration measurements may be required at the discretion of the appropriate TCEQ Regional Manager.
 - (2) The system shall be zeroed and spanned daily, and corrective action taken when the 24-hour span drift exceeds two times the amounts specified in the applicable Performance Specification Nos. 1 through 9, 40 CFR Part 60, Appendix B, or as specified by the TCEQ if not specified in Appendix B. Zero and span is not required on weekends and plant holidays if instrument technicians are not normally scheduled on those days.

Each monitor shall be quality-assured at least quarterly using Cylinder Gas Audits (CGA) in accordance with 40 CFR Part 60, Appendix F, Procedure 1, Section 5.1.2, with the following exception: a relative accuracy test audit (RATA) is not required once every four quarters (i.e., four successive quarterly CGA may be conducted). An equivalent quality-assurance method approved by the TCEQ may also be used. Successive quarterly audits shall occur no closer than two months.

All CGA exceedances of ± 15 percent accuracy indicate that the CEMS is out of control.

- C. The monitoring data shall be reduced to hourly average concentrations at least once every day, using a minimum of four equally-spaced data points from each one-hour period. The permit holder shall install and operate a fuel flow meter to measure the gas fuel usage for each heater. The monitored data shall be reduced to an hourly average flow rate at least once every day, using a minimum of four equally-spaced data points from each one-hour period. Each fuel flow monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications or at least annually, whichever is more frequent, and shall be accurate to within 5 percent. In lieu of monitoring fuel flow, the permit holder may monitor stack exhaust flow using the flow monitoring specifications of 40 Code of Federal Regulations (CFR) Part 60, Appendix B, Performance Specification 6 or 40 CFR Part 75, Appendix A.

The individual average concentrations shall be reduced to units of pounds per hour and pounds per million BTU at least once every week as follows:

The measured hourly average concentration from the CEMS shall be multiplied by the exhaust flow rate as measured directly, or determined by monitoring fuel flow, stack oxygen concentration, and the natural gas heating value, to determine the hourly emission rate. The emission rate and fuel gas flow and heating value shall be used to determine the lb NO_x/MMBtu heat input.

- D. All monitoring data and quality-assurance data shall be maintained by the permit holder. The data from the CEMS may, at the discretion of the TCEQ, be used to determine compliance with the conditions of this permit.
- E. The appropriate TCEQ Regional Office shall be notified at least 30 days prior to any required RATA in order to provide them the opportunity to observe the testing.
- F. Quality-assured (or valid) data must be generated when the heater is operating except during the performance of a daily zero and span check. Loss of valid data due to periods of monitor break down, out-of-control operation (producing inaccurate data), repair, maintenance, or calibration may be exempted provided it does not exceed 5 percent of the time (in minutes) that the heater operated over the previous rolling 12-month period. The measurements missed shall be estimated using engineering judgment and the methods used recorded. Options to increase system reliability to an acceptable value, including a redundant CEMS, may be required by the TCEQ Regional Manager.
11. The permit holder shall continuously monitor ammonia emissions from the heater SCR systems (EPNs F-101 and F-201) using one of the following methods:
- A. Install and operate two NO_x CEMS, one located upstream of the SCR system and the other located downstream of the SCR system, which are used in association with ammonia injection rate and the following calculation procedure to estimate ammonia slip.
- $$\text{Ammonia slip, ppmvd} = ((a - (b \times c / 1,000,000)) \times 1,000,000 / b) \times d$$
- where:
- a = ammonia injection rate (lb/hr)/17 (lb/lb-mole);

- b = dry exhaust gas flow rate (lb/hr)/29 (lb/lb-mole);
- c = change in measured NO_x concentration, ppmvd, across catalyst; and
- d = correction factor.

The correction factor shall be derived during compliance testing by comparing the measured and calculated ammonia slip. The ammonia injection rate and exhaust gas flow rate shall be recorded at least every 15 minutes and be recorded as hourly averages. Each flow monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, or at least annually, whichever is more frequent, and shall be accurate to within 2 percent of span or 5 percent of the design value.

- B. Install and operate a dual stream system of NO_x CEMS at the exit of the SCR system. One of the exhaust streams would be routed, in an unconverted state, to one NO_x CEMS and the other exhaust stream would be routed through a NH₃ converter to convert NH₃ to NO_x and then to a second NO_x CEMS. The NH₃ slip concentration shall be calculated from the delta between the two NO_x CEMS readings (converted and unconverted).
- C. Install an ammonia CEMS approved by TCEQ.

All CEMS specified in this condition must meet the requirements of Special Condition No. 10. Quality-assured (or valid) data must be generated when gas is directed to the SCR system. Loss of valid data due to periods of monitor break down, out-of-control operation (producing inaccurate data), repair, maintenance, or calibration may be exempted provided it does not exceed 5 percent of the time that gas is directed to the SCR system over the previous rolling 12-month period. The measurements missed shall be estimated using engineering judgment and the methods used recorded.

12. Flares shall be designed and operated in accordance with the following requirements:

- A. The flare system shall be designed such that the combined assist natural gas and waste stream to each flare meets the 40 CFR § 60.18 specifications of minimum heating value and maximum tip velocity under normal, upset, and maintenance flow conditions.

The heating value and velocity requirements shall be satisfied during operations authorized by this permit. Flare testing per 40 CFR § 60.18(f) may be requested by the appropriate regional office to demonstrate compliance with these requirements.
- B. The flare shall be operated with a flame present at all times and/or have a constant pilot flame. The pilot flame shall be continuously monitored by a thermocouple or an infrared monitor. The time, date, and duration of any loss of pilot flame shall be recorded. Each monitoring device shall be accurate to, and shall be calibrated at a frequency in accordance with, the manufacturer's specifications
- C. The flare shall be operated with no visible emissions except periods not to exceed a total of five minutes during any two consecutive hours. This shall be ensured by the use of air assist to the flare

Leak Detection and Repair

13. Piping, Valves, Pumps, Agitators, and Compressors - Intensive Directed Maintenance — 28LAER

Except as may be provided for in the special conditions of this permit, the following requirements apply to the above-referenced equipment:

- A. The requirements of paragraphs F and G shall not apply (1) where the VOC has an aggregate partial pressure or vapor pressure of less than 0.044 pounds per square inch, absolute (psia) at 68°F or (2) operating pressure is at least 5 kilopascals (0.725 psi) below ambient pressure. Equipment excluded from this condition shall be identified in a list or by one of the methods described below to be made readily available upon request.

The exempted components may be identified by one or more of the following methods:

- (1) piping and instrumentation diagram (PID);
 - (2) a written or electronic database or electronic file;
 - (3) color coding;
 - (4) a form of weatherproof identification; or
 - (5) designation of exempted process unit boundaries.
- B. Construction of new and reworked piping, valves, pump systems, and compressor systems shall conform to applicable American National Standards Institute (ANSI), American Petroleum Institute (API), American Society of Mechanical Engineers (ASME), or equivalent codes.
- C. New and reworked underground process pipelines shall contain no buried valves such that fugitive emission monitoring is rendered impractical. New and reworked buried connectors shall be welded.
- D. To the extent that good engineering practice will permit, new and reworked valves and piping connections shall be so located to be reasonably accessible for leak-checking during plant operation. Difficult-to-monitor and unsafe-to-monitor valves, as defined by Title 30 Texas Administrative Code Chapter 115 (30 TAC Chapter 115), shall be identified in a list to be made readily available upon request. The difficult-to-monitor and unsafe-to-monitor valves may be identified by one or more of the methods described in subparagraph A above. If an unsafe to monitor component is not considered safe to monitor within a calendar year, then it shall be monitored as soon as possible during safe to monitor times. A difficult to monitor component for which quarterly monitoring is specified may instead be monitored annually.
- E. New and reworked piping connections shall be welded or flanged. Screwed connections are permissible only on piping smaller than two-inch diameter. Gas or hydraulic testing of the new and reworked piping connections at no less than operating pressure shall be performed prior to returning the components to service

or they shall be monitored for leaks using an approved gas analyzer within 15 days of the components being returned to service. Adjustments shall be made as necessary to obtain leak-free performance.

Connectors shall be inspected by visual, audible, and/or olfactory means at least weekly by operating personnel walk-through. In addition, all connectors shall be monitored by leak-checking for fugitive emissions at least quarterly using an approved gas analyzer with a directed maintenance program in accordance with items F thru J of this special condition.

In lieu of the monitoring frequency specified above, connectors may be monitored on a semiannual basis if the percent of connectors leaking for two consecutive quarterly monitoring periods is less than 0.5 percent.

Connectors may be monitored on an annual basis if the percent of connectors leaking for two consecutive semiannual monitoring periods is less than 0.5 percent.

If the percent of connectors leaking for any semiannual or annual monitoring period is 0.5 percent or greater, the facility shall revert to quarterly monitoring until the facility again qualifies for the alternative monitoring schedules previously outlined in this paragraph.

The percent of connectors leaking shall be determined using the following formula:

$$(Cl + Cs) \times 100 / Ct = Cp$$

Where:

Cl = the number of connectors found leaking by the end of the monitoring period, either by Method 21 or sight, sound, and smell.

Cs = the number of connectors for which repair has been delayed and are listed on the facility shutdown log.

Ct = the total number of connectors in the facility subject to the monitoring requirements, as of the last day of the monitoring period, not including non-accessible and unsafe to monitor connectors.

Cp = the percentage of leaking connectors for the monitoring period.

Each open-ended valve or line shall be equipped with an appropriately sized cap, blind flange, plug, or a second valve to seal the line. Except during sampling, both valves shall be closed. If the isolation of equipment for hot work or the removal of a component for repair or replacement results in an open ended line or valve, it is exempt from the requirement to install a cap, blind flange, plug, or second valve for 72 hours. If the repair or replacement is not completed within 72 hours, the permit holder must complete either of the following actions within that time period;

- (1) a cap, blind flange, plug, or second valve must be installed on the line or valve;
or
- (2) the open-ended valve or line shall be monitored once for leaks above background for a plant or unit turnaround lasting up to 45 days with an approved gas analyzer and the results recorded. For all other situations, the

open-ended valve or line shall be monitored once by the end of the 72 hours period following the creation of the open ended line and monthly thereafter with an approved gas analyzer and the results recorded. For turnarounds and all other situations, leaks are indicated by readings of 500 ppmv and must be repaired within 24 hours or a cap, blind flange, plug, or second valve must be installed on the line or valve.

- F. Accessible valves shall be monitored by leak checking for fugitive emissions at least quarterly using an approved gas analyzer with a directed maintenance program. Non accessible valves shall be monitored by leak-checking for fugitive emissions at least annually using an approved gas analyzer with a directed maintenance program. Sealless/leakless valves (including, but not limited to, welded bonnet bellows and diaphragm valves) and relief valves equipped with a rupture disc upstream or venting to a control device are not required to be monitored. For valves equipped with rupture discs, a pressure-sensing device shall be installed between the relief valve and rupture disc to monitor disc integrity. All leaking discs shall be replaced at the earliest opportunity but no later than the next process shutdown. A check of the reading of the pressure-sensing device to verify disc integrity shall be performed at least quarterly and recorded in the unit log or equivalent. Pressure-sensing devices that are continuously monitored with alarms are exempt from recordkeeping requirements specified in this paragraph.

The gas analyzer shall conform to requirements listed in Method 21 of 40 CFR Part 60, Appendix A. The gas analyzer shall be calibrated with methane. In addition, the response factor of the instrument for a specific VOC of interest shall be determined and meet the requirements of Section 8 of Method 21. If a mixture of VOCs is being monitored, the response factor shall be calculated for the average composition of the process fluid. A calculated average is not required when all of the compounds in the mixture have a response factor less than 10 using methane. If a response factor less than 10 cannot be achieved using methane, then the instrument may be calibrated with one of the VOC to be measured or any other VOC so long as the instrument has a response factor of less than 10 for each of the VOC to be measured.

A directed maintenance program shall consist of the repair and maintenance of components assisted simultaneously by the use of an approved gas analyzer such that a minimum concentration of leaking VOC is obtained for each component being maintained. Replaced components shall be re-monitored within 15 days of being placed back into VOC service.

- G. All new and replacement pumps, compressors, and agitators shall be equipped with a shaft sealing system that prevents or detects emissions of VOC from the seal. These seal systems need not be monitored and may include (but are not limited to) dual pump seals with barrier fluid at higher pressure than process pressure, seals degassing to vent control systems kept in good working order, or seals equipped with an automatic seal failure detection and alarm system. Submerged pumps or sealless pumps (including, but not limited to, diaphragm, canned, or magnetic-driven pumps) may be used to satisfy the requirements of this condition and need not be monitored.

All other pump, compressor, and agitator seals shall be monitored with an approved gas analyzer at least quarterly.

- H. Damaged or leaking valves, connectors, compressor seals, pump seals, and agitator seals found to be emitting VOC in excess of 500 parts per million by volume (ppmv) or found by visual inspection to be leaking (e.g., dripping process fluids) shall be tagged and replaced or repaired. A first attempt to repair the leak must be made within 5 days. Records of the first attempt to repair shall be maintained. A leaking component shall be repaired as soon as practicable, but no later than 15 days after the leak is found. If the repair of a component would require a unit shutdown that would create more emissions than the repair would eliminate, the repair may be delayed until the next scheduled shutdown. All leaking components which cannot be repaired until a scheduled shutdown shall be identified for such repair by tagging. A listing of all components that qualify for delay of repair shall be maintained on a delay of repair list. The cumulative daily emissions from all components on the delay of repair list shall be estimated by multiplying by 24 the mass emission rate for each component calculated in accordance with the instructions in 30 TAC 115.782 (c)(1)(B)(i)(II). The calculations of the cumulative daily emissions from all components on the delay of repair list shall be updated within ten days of when the latest leaking component is added to the delay of repair list. When the cumulative daily emission rate of all components on the delay of repair list times the number of days until the next scheduled unit shutdown is equal to or exceeds the total emissions from a unit shutdown as calculated in accordance with 30 TAC 115.782 (c)(1)(B)(i)(I), the TCEQ Regional Manager and any local programs shall be notified and may require early unit shutdown or other appropriate action based on the number and severity of tagged leaks awaiting shutdown. This notification shall be made within 15 days of making this determination.
- I. Records of repairs shall include date of repairs, repair results, justification for delay of repairs, and corrective actions taken for all components. Records of instrument monitoring shall indicate dates and times, test methods, and instrument readings. The instrument monitoring record shall include the time that monitoring took place for no less than 95% of the instrument readings recorded. Records of physical inspections shall be noted in the operator's log or equivalent.
- J. Compliance with the requirements of this condition does not assure compliance with requirements of 30 TAC Chapter 115, an applicable New Source Performance Standard (NSPS), or an applicable National Emission Standard for Hazardous Air Pollutants (NESHAPS), and does not constitute approval of alternative standards for these regulations.
- K. In lieu of the monitoring frequency specified in paragraph F, valves in gas and light liquid service may be monitored on a semiannual basis if the percent of valves leaking for two consecutive quarterly monitoring periods is less than 0.5 percent.

Valves in gas and light liquid service may be monitored on an annual basis if the percent of valves leaking for two consecutive semiannual monitoring periods is less than 0.5 percent.

If the percent of valves leaking for any semiannual or annual monitoring period is 0.5 percent or greater, the facility shall revert to quarterly monitoring until the facility again qualifies for the alternative monitoring schedules previously outlined in this paragraph.

- L. The percent of valves leaking used in paragraph K shall be determined using the following formula:

$$(V_l + V_s) \times 100 / V_t = V_p$$

Where:

V_l = the number of valves found leaking by the end of the monitoring period, either by Method 21 or sight, sound, and smell.

V_s = the number of valves for which repair has been delayed and are listed on the facility shutdown log.

V_t = the total number of valves in the facility subject to the monitoring requirements, as of the last day of the monitoring period, not including nonaccessible and unsafe to monitor valves.

V_p = the percentage of leaking valves for the monitoring period.

- M. Any component found to be leaking by physical inspection (i.e., sight, sound, or smell) shall be repaired or monitored with an approved gas analyzer within 15 days to determine whether the component is leaking in excess of 500 ppmv of VOC. If the component is found to be leaking in excess of 500 ppmv of VOC, it shall be subject to the repair and replacement requirements contained in this special condition.
14. All components in heavy liquid service shall be inspected by visual, audible, and/or olfactory means at least weekly by operating personnel walk-through in the same manner as required for connectors in Special Condition 13.E.
15. Piping, valves, pumps, and compressors in greater than one weight percent ammonia service are subject to the following requirements.
- A. Audio, olfactory, and visual checks for ammonia leaks within the operating area shall be made every shift.
- B. Immediately, but no later than twelve hours upon detection of a leak, plant personnel shall take the following actions:
- (1) Isolate the leak.
 - (2) Commence repair or replacement of the leaking component.
 - (3) Use a leak collection/containment system to prevent the leak until repair or replacement can be made if immediate repair is not possible.
- Date and time of each inspection shall be noted in the operator's log or equivalent. Records shall be maintained at the plant site of all repairs and replacements made due to leaks.

Tanks

16. Tanks are authorized to store the liquids identified below with the maximum tank fill/drain rates. **(10/14)**

Tank ID	Tank Type	Service	Maximum fill/drain rate (bbl/hr)
200-1 200-2 200-3	Internal floating roof	Condensate	15,000
150-10 100-11 100-12 100-20 100-21 120-22 120-23	Internal floating roof	Distillates	10,000
100-13	Internal floating roof	Condensate and Distillates	10,000
100-14	Internal floating roof	Condensate and Light Naphtha	10,000
100-15 100-24 100-25	Internal floating roof	Light Naphtha and Heavy Naphtha	10,000
PV-410 PV-411	Pressurized	Y-grade product	n/a
5-0	Internal floating roof	Wastewater	5,000

“Distillates” may include Atmospheric Residuum (“Resid”), Kerosene, Diesel fuel and other heavy fuel oils.

17. Atmospheric storage tanks are subject to the following requirements:
- A. Uninsulated tank exterior surfaces exposed to the sun shall be white. Storage tanks must be equipped with permanent submerged fill pipes.
 - B. Each tank shall be designed to completely drain its entire contents to a sump in a manner that leaves no more than 9 gallons of free-standing liquid in the tank sump.
 - C. Tanks storing liquids with VOC vapor pressures greater than 0.10 psia shall meet the following requirements.
 - (1) An internal floating deck or “roof” or equivalent control shall be installed in all tanks. The floating roof shall be equipped with two continuous seals mounted one above the other between the wall of the storage vessel and the edge of the internal floating roof:

- (2) The permit holder shall perform the visual inspections and any seal gap measurements as specified in Title 40 Code of Federal Regulations § 60.113b (40 CFR § 60.113b) Testing and Procedures (as amended at 54 FR 32973, Aug. 11, 1989) to verify fitting and seal integrity. Records shall be maintained of the dates the inspection was performed, any measurements made (including raw data), results of the inspections, and actions taken to correct any deficiencies noted.
 - (3) The floating roof design shall incorporate sufficient flotation to conform to the requirements of API Code 650 dated November 1, 1998 except that an internal floating cover need not be designed to meet rainfall support requirements and the materials of construction may be steel or other materials. The floating roof shall be welded (not bolted).
 - (4) The concentration of organic vapor in the vapor space above the internal floating roof shall not exceed 30 percent of its lower explosive limit (LEL). The permit holder shall visually inspect the rim seal system and roof openings and use an explosimeter to measure the LEL on a semiannual basis. Records shall be maintained of the dates the inspections and measurements were made, results of inspections and measurements made (including raw data), and actions taken to correct any deficiencies noted.
 - (5) Tanks shall be constructed or equipped with a connection to a vapor recovery system that routes vapors from the vapor space under the landed roof (roof not floating on liquid) to a control device.
- D. For tanks storing liquids with VOC vapor pressures greater than 0.50 psia, an internal floating deck of welded design shall be installed. **(10/14)**
- E. The following requirements apply to storage tanks receiving or storing materials at above ambient temperature: **(10/14)**
- (1) The permit holder shall reduce the temperature and/or vapor pressure of the stored material as needed to maintain a vapor pressure of less than 11.0 psia at actual storage conditions in each storage tank.
 - (2) For products stored in bolted deck storage tanks (EPNs 150-10, 100-11, 100-12, 100-21, 120-22 and 120-23), the permit holder shall reduce the temperature and/or vapor pressure of the stored material as needed to maintain a vapor pressure of less than 0.50 psia at actual storage conditions.
 - (3) For all tanks storing compounds requiring temperature and/or vapor pressure monitoring per items (1)–(2) of this special condition, the following sampling, monitoring and recordkeeping requirements apply:
 - (a) The liquid surface temperature shall be measured and recorded on a daily basis. The temperature measurement device shall be calibrated on an annual basis.
 - (b) No later than 90 days following the start of operation, the permit holder shall undertake sampling to determine the vapor pressure-temperature

relationship for each product subject to temperature and/or vapor pressure monitoring per items (1)–(2) of this special condition.

Vapor pressure-temperature relationship shall be determined by ASTM D2879 (1997 or later revision). An alternate ASTM standard may be used if the permit holder determines the alternate standard to be more appropriate. Additional sampling methods can be approved by the TCEQ Regional Director.

Records of vapor pressure-temperature relationship sampling shall include an indication of the method employed for analysis, and the correlation equation developed.

- (c) The permit holder shall repeat the sampling procedure required in (b) on a quarterly basis.
 - (d) Compliance with items (1)–(2) of this special condition shall be determined from temperature monitoring data using the most recent vapor pressure-temperature relationship, with the following exceptions:
 - i. Prior to 90 days following the start of operations, vapor pressure may be estimated from process knowledge.
 - ii. If changes in product specifications affecting the vapor pressure properties of the liquid have occurred since the most recent sampling event, a suitable vapor pressure-temperature relationship having been determined within the past two years can be used.
 - (4) If measured temperature and/or vapor pressure indicate an excursion above the maximum vapor requirements of items (1)–(2) of this special condition, the permit holder may take up to 72 hours to lower the product temperature such that the liquid vapor pressure is below the permissible level. The method used to lower the product temperature shall be documented.
18. The permit holder shall maintain an emissions record which includes calculated emissions of VOC from all storage tanks during the previous calendar month and the past consecutive 12 month period. The record shall include tank identification number, control method used, tank capacity in gallons, name of the material stored, VOC molecular weight, VOC monthly average temperature in degrees Fahrenheit, VOC vapor pressure at the monthly average material temperature in psia, VOC throughput for the previous month and year-to-date. Records of VOC monthly average temperature are not required to be kept for unheated tanks which receive liquids that are at or below ambient temperatures. EPA Tanks 4.09 average monthly temperatures may be used for determining the monthly emissions from unheated tanks which receive liquids that are at or below ambient temperatures.

Emissions for tanks shall be calculated using the methods used to determine the MAERT limits in the permit application for the facilities authorized by this permit. Sample calculations from the application shall be attached to a copy of this permit at the terminal.

19. Construction of additional volatile organic liquid storage tanks can be authorized only through the mechanisms detailed in this special condition. **(10/14)**
 - A. Construction permit or permit amendment.
 - B. Permit by Rule (PBR), provided that:
 - (1) New storage tanks comply with the design and operational requirements of Special Condition 17; and
 - (2) New floating roof storage tanks are designed to be drain dry, and designed with connections to control vapors under a landed roof.
20. Emissions associated with the transfer between storage tanks authorized in this permit and other storage tanks at this site in service prior to the start of operation of the last tank authorized by this permit (all storage tanks authorized by NSR Permit 2193 on September 1, 2012; subsequently referred to as existing tanks) is limited such that the annual emissions from these activities shall not exceed 5.0 tons in any rolling 12 month period. These emissions shall be determined as follows:
 - A. If liquid is transferred from a tank authorized by this permit to an existing tank, the emissions due to filling (i.e., working losses) the existing tank shall be quantified. If the liquid transferred to the existing tank is subsequently loaded, those emissions must also be quantified.
 - B. For transfer of liquid from an existing tank to a tank authorized by this permit, the emissions associated with refilling (i.e., working losses) the existing tank shall be quantified. If the roof of the existing tank is landed, also add the emissions from the existing tank from the time the transfer to the new tank was completed until the existing tank roof is floated again.

Tank emissions shall be determined and documented in accordance with Special Conditions 18 and 37, as applicable. Loading emissions shall be determined and documented in accordance with Special Condition 28. The permit holder shall maintain an emissions record which includes calculated emissions of VOC identified in paragraphs A and B during the previous calendar month and the past consecutive 12 month period.

Marine Loading and Vapor Combustors

21. Marine loading of product from these facilities shall not exceed the following rates:
(10/14)

Type of Vessel Loaded	Product loaded	Loading Rate (bbl/hr)
Ship	Naphthas, Kerosene/Distillate, Resid	10,000
Barge	Kerosene/Distillate, Resid	10,000
Barge	Naphthas	7,500

22. Notwithstanding any contrary requirement of Special Condition 21, the permit holder shall comply with one of the following restrictions for the barge loading of Resid **(10/14)**:
- A. Loading shall not occur at more than one barge during any sixty minute period.
 - B. The combined fill rate for barge loading shall not exceed 5,000 Bbl/hr over any sixty minute period.
 - C. The vapor pressure of the material to be loaded shall be determined following the procedure in Special Condition 17.E(3)(b), and that vapor pressure shall be no greater than 0.10 psia at actual loading conditions.
 - D. The permit holder shall submit a permit amendment application which includes sitewide modeling results for residual fuel emissions. Sitewide modeling results shall be subject to approval by the TCEQ Toxicology Division.
23. All loading lines (hoses) and connectors shall be visually inspected for any defects prior to hookup. Lines and connectors that are visibly damaged shall be removed from service. Operations shall cease immediately upon detection of any liquid leaking from the lines or connections. Flanged connections shall be used for all loading operations. The following actions shall be taken prior to removing loading lines/hoses from marine vessels and shore facilities.
- A. After the transfer is complete, the loading line/hose shall be isolated at the connection to the shore piping. The loading line/hose shall be vented at the shore piping and shall be gravity drained into the marine vessel per the site operating procedure.
 - B. The loading line/hose may be disconnected from the shore and/or marine vessel piping after the liquid has been removed to the extent possible by gravity draining to the vessel being loaded. If it is necessary to further empty the line/hose, any residual liquid in the line/hose shall be immediately drained directly into a covered sump. If the line/hose is not emptied, the open end(s) of the line/hose shall be immediately capped, plugged, or blinded to prevent leakage.
 - C. After the loading line/hose has been removed from the vessel, the vapor return line shall be immediately isolated.
- The actions shall be documented as part of the loading procedure.
24. All ship and barge loading emissions shall be directed to a vapor combustor for control if the liquid loaded has a vapor pressure greater than 0.10 psia at 95°F, or has a vapor pressure greater than 0.50 psia at actual loading conditions. Marine vessels shall not be loaded with liquid unless the vapor collection system is properly connected and the entire collection and destruction system is working as designed. **(10/14)**
25. If the liquid to be loaded has a VOC vapor pressure is greater than 0.10 psia at 95°F, or has a vapor pressure greater than 0.50 psia at actual loading conditions, the following requirements apply. The requirements of paragraphs C–H apply to all controlled ship

loading activities at the Galena Park Terminal (Regulated Entity Number [RN] 100237452). **(10/14)**

- A. Unless the vessel must be inerted during loading due to safety requirements, the marine loading vapor collection system shall be operated such that the vacuum maintained in the collection system during loading is no less than one inch of water and that the vessel being loaded is also under a vacuum. The collection system vacuum shall be continuously monitored and recorded at least once every 15 minutes. The vacuum monitor shall be installed, calibrated at least annually, and maintained according to the manufacturer's specifications. The device shall have an accuracy of the greater of ± 5 percent of the vacuum being measured or ± 0.15 inches of water.
- B. If the vessel must remain inerted during loading (it is not possible to draw a vacuum on the marine vessel) due to safety concerns, the marine vessel must have passed an annual vapor tightness test as specified in 40 CFR § 63.565(c) (September 19, 1995) or 40 CFR § 61.304(f) (October 17, 2000). The permit holder shall record the leak test documentation for all ships loaded.
- C. Uncaptured emissions (i.e., loading fugitives) from any ship shall not exceed 0.14 lb VOC per 1000 Bbl liquid loaded.
- D. For the purposes of demonstrating compliance with the emission standard of paragraph C, VOC collection tests of ships received at the Galena Park Terminal shall be conducted as follows:
 - (1) Testing shall be conducted in accordance with the Testing Protocol in Attachment A of this permit.
 - (2) Compliance with the emission standard in paragraph C shall be demonstrated individually for each ship tested.
 - (3) The initial testing period begins after the first full calendar month from the date the permit is issued.
 - (4) Testing shall be completed at least 6 times per rolling 12-months period, and at least once per rolling 3-months period.
 - (5) Upon completion of regular testing as specified by this condition over a 60-month period, the permit holder may request approval to discontinue testing from the TCEQ, Air Permits Division.
 - (6) The same ship shall not be tested consecutively.
 - (7) Revisions to the test protocol in Attachment A of this permit shall not be made without the approval of the TCEQ, Air Permits Division.
 - (8) The Regional Office shall be notified at least 48 hours prior to each testing required by this condition.
- E. The permit holder shall maintain the following records for each ship tested for a period of 5 years from the date of testing:

- (1) The most recent vapor tightness certificate.
 - (2) A recent, completed form Q88.
 - F. Records of each testing conducted in accordance with paragraph D shall be maintained on site for a period of 5 years from the date of testing.
 - G. The permit holder shall maintain an emissions record which includes calculated emissions of VOC from all marine ship loading during the previous calendar month and the past consecutive 12 month period (i.e. 12-month rolling basis). The record shall include ship name and the total barrels loaded. Emissions from marine loading shall be calculated using the methods that were used to determine the MAERT limits in the permit application.
 - H. Records relating to ship testing shall be submitted to the TCEQ, Air Permits Division, as follows:
 - (1) During the first 12 months for which testing is required by this condition, test results shall be submitted for each testing event, no later than 60 days following the testing event.
 - (2) Following the initial period referred to in paragraph (1), the permit holder may submit either:
 - (a) Individual test results within 60 days of each testing event; or
 - (b) A summary of all testing results during the preceding 12-months, for each 12 month period following the initial period referred to in paragraph (1).
 - (3) Notwithstanding the requirements of paragraph (2), if testing is not conducted in accordance with the requirements of paragraph D of this condition, then the initial period referred to in paragraph (1) shall be extended so that it only covers months during which the permit holder was in compliance with the requirements of paragraph D.
 - I. Records shall be made available upon request by authorized representatives of the TCEQ, Air Permits Division or the TCEQ Office of Compliance and Enforcement.
26. The vapor combustors (EPNs: VCU-1A, VCU-1B, VCU-2A, VCU-2B, VCU-2C, and SD-4-VCU) used to control emissions shall achieve 99.8 percent control of the carbon compounds directed to it or reduce the VOC concentration in the exhaust to no greater than 10 ppmv corrected to 3 percent oxygen. This shall be ensured by maintaining the temperature in the combustion chamber above 1400°F prior to the initial stack test performed in accordance with Special Condition 26. Following the completion of that stack test, the six minute average temperature shall be maintained above the minimum one hour average temperature maintained during the last satisfactory stack test.

The temperature measurement device shall reduce the temperature readings to an averaging period of 6 minutes or less and record it at that frequency. The temperature monitor shall be installed, calibrated at least annually, and maintained according to the manufacturer's specifications. The device shall have an accuracy of the greater of ± 2 percent of the temperature being measured expressed in degrees Fahrenheit or $\pm 4.5^{\circ}\text{F}$.

Quality assured (or valid) data must be generated when the VCU is operating. Loss of valid data due to periods of monitor break down, out-of-control operation (producing inaccurate data), repair, maintenance, or calibration may be exempted provided it does not exceed 5 percent of the time (in minutes) that the VCU operated over the previous rolling 12 month period. The measurements missed shall be estimated using engineering judgment and the methods used recorded.

27. Each vapor combustor shall be operated with no visible emissions and have a constant pilot flame during all times waste gas could be directed to it. The pilot flame shall be continuously monitored by a thermocouple or an infrared monitor. The time, date, and duration of any loss of pilot flame shall be recorded. Each monitoring device shall be accurate to, and shall be calibrated at a frequency in accordance with, the manufacturer's specifications.
28. The permit holder shall maintain and update monthly an emissions record which includes calculated emissions of VOC from all loading operations over the previous rolling 12 month period. The record shall include the loading spot, control method used, quantity loaded in gallons, name of the liquid loaded, vapor molecular weight, liquid temperature in degrees Fahrenheit, liquid vapor pressure at the liquid temperature in psia, liquid throughput for the previous month and rolling 12 months to date. Records of VOC temperature are not required to be kept for liquids loaded from unheated tanks which receive liquids that are at or below ambient temperatures. Loading emissions shall be calculated using the methods used to determine the MAERT limits in the permit application for the facilities authorized by this permit. Sample calculations from the application shall be attached to a copy of the permit at the terminal.
29. Additional loading facilities, and throughput increases at existing facilities, shall not be authorized except in accordance with the requirements of this condition.
 - A. Additional barge loading facilities, or increased throughput in barge loading, can be authorized by:
 - (1) Permit amendment; or
 - (2) Permit by Rule, provided that the control, monitoring and recordkeeping procedures are consistent with applicable requirements of Special Conditions 22–28.
 - B. Additional ship loading facilities can be authorized by permit amendment. No additional ship loading facilities shall be constructed under Permit by Rule (PBR) without written approval of the TCEQ Executive Director.
 - C. Increased throughput in ship loading can be authorized by:
 - (1) Permit amendment; or
 - (2) Permit by Rule, provided that the control, monitoring and recordkeeping procedures are consistent with applicable requirements of Special Conditions 22–28.

Stack Sampling

30. Sampling ports and platform(s) shall be incorporated into the design of the heaters (EPNs F-101 and F-201) and vapor combustors (EPNs VCU-1A, VCU-1B, VCU-2A, VCU-2B, VCU-2C, and SD-4-VCU) according to the specifications set forth in the attachment entitled "Chapter 2, Stack Sampling Facilities" of the Texas Commission on Environmental Quality (TCEQ) Sampling Procedures Manual. Alternate sampling facility designs must be submitted for approval to the TCEQ Regional Director.
31. The permit holder shall perform stack sampling and other testing as required to establish the actual pattern and quantities of air contaminants being emitted into the atmosphere from the heaters (EPNs F-101 and F-201) and vapor combustors (EPNs VCU-1A, VCU-1B, VCU-2A, VCU-2B, VCU-2C, and SD-4-VCU) to demonstrate compliance with the MAERT, and Special Conditions 8 and 26. The permit holder is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at his expense. Sampling shall be conducted in accordance with the appropriate procedures of the Texas Commission on Environmental Quality (TCEQ) Sampling Procedures Manual and the U.S. Environmental Protection Agency (EPA) Reference Methods.

Requests to waive testing for any pollutant specified in this condition shall be submitted to the TCEQ Office of Air, Air Permits Division. Test waivers and alternate/equivalent procedure proposals for Title 40 Code of Federal Regulation Part 60 (40 CFR Part 60) testing which must have EPA approval shall be submitted to the TCEQ Regional Director.

- A. The appropriate TCEQ Regional Office shall be notified not less than 45 days prior to sampling. The notice shall include:
 - (1) Proposed date for pretest meeting.
 - (2) Date sampling will occur.
 - (3) Name of firm conducting sampling.
 - (4) Type of sampling equipment to be used.
 - (5) Method or procedure to be used in sampling.
 - (6) Description of any proposed deviation from the sampling procedures specified in this permit or TCEQ/EPA sampling procedures.
 - (7) Procedure/parameters to be used to determine worst case emissions during the sampling period.

The purpose of the pretest meeting is to review the necessary sampling and testing procedures, to provide the proper data forms for recording pertinent data, and to review the format procedures for the test reports. The TCEQ Regional Director must approve any deviation from specified sampling procedures.

- B. Air contaminants emitted from the heaters to be tested for include (but are not limited to) CO, NO_x, PM_{2.5} (condensable and filterable), and ammonia. Air

contaminants emitted from the vapor combustors to be tested for include (but are not limited to) VOC, CO, and NO_x. **(10/14)**

- C. Sampling shall occur within 60 days after achieving the maximum operating rate, but no later than 180 days after initial start-up of the facilities and at such other times as may be required by the TCEQ Executive Director. Requests for additional time to perform sampling shall be submitted to the appropriate regional office.

Sampling associated with VCU-1A, VCU-1B, VCU-2A, VCU-2B, VCU-2C, and SD-4-VCU and authorized by the nonattainment permit N158 shall occur within 60 days after achieving the maximum operating rate authorized by nonattainment permit N158, but no later than 180 days after initial start-up of the facilities and at such other times as may be required by the TCEQ Executive Director. Requests for additional time to perform sampling shall be submitted to the appropriate TCEQ Regional Office. Existing stack test records may be used to demonstrate compliance in lieu of conducting a new stack test on a VCU.

- D. The heater being sampled shall operate at the maximum firing rate during stack emission testing. The VCU shall be operated with maximum waste gas flow (loading rate) and VOC concentration (loading light naphtha or equivalent gasoline blend) to demonstrate compliance with the maximum allowable emission rate limits. The VCU shall be operated with maximum waste gas flow when determining the minimum operating temperature and demonstrating compliance with the minimum destruction efficiency requirement. These conditions/parameters and any other primary operating parameters that affect the emission rate shall be monitored and recorded during the stack test. Any additional parameters shall be determined at the pretest meeting and shall be stated in the sampling report. Permit conditions and parameter limits may be waived during stack testing performed under this condition if the proposed condition/parameter range is identified in the test notice specified in paragraph A and accepted by the TCEQ Regional Office. Permit allowable emissions and emission control requirements are not waived and still apply during stack testing periods.

During subsequent operations, if the waste gas flow rate to the vapor combustor is greater than that recorded during the test period, stack sampling shall be performed at the new operating conditions within 120 days. This sampling may be waived by the TCEQ Air Section Manager for the region.

- E. Copies of the final sampling report shall be forwarded to the offices below within 60 days after sampling is completed. Sampling reports shall comply with the attached provisions entitled "Chapter 14, Contents of Sampling Reports" of the TCEQ Sampling Procedures Manual. The reports shall be distributed as follows:

One copy to the appropriate TCEQ Regional Office.

One copy to each local air pollution control program.

Offsets

32. The following requirements apply to offsets: **(10/14)**

- A. This Nonattainment New Source Review (NNSR) permit is issued based on the use of 82.9 tons per year (tpy) VOC emission reduction credits (ERCs) from TCEQ Emission Reduction Credit Certificate (ERCC) No. 2778. This ERCC provides offsets at the ratio of 1.3 to 1 for 63.76 tpy of VOC emissions authorized from the following facilities under this permit:
- (1) Naphtha Splitter Reboiler Train I (EPN: F-101) — 6.9 tpy
 - (2) Naphtha Splitter Reboiler Train II (EPN: F-102) — 6.9 tpy
 - (3) Flare No. 101 (EPN: FL-101) — 0.2 tpy
 - (4) Tank No. 200-1 (EPN: 200-1) — 6.0 tpy
 - (5) Tank No. 200-2 (EPN: 200-2) — 6.0 tpy
 - (6) Tank No. 200-3 (EPN: 200-3) — 6.0 tpy
 - (7) Tank No. 100-20 (EPN: 100-20) — 0.3 tpy
 - (8) Tank No. 150-10 (EPN: 150-10) — 0.9 tpy
 - (9) Tank No. 120-24 (EPN: 120-24) — 3.5 tpy
 - (10) Tank No. 100-21 (EPN: 100-21) — 0.3 tpy
 - (11) Tank No. 100-11 (EPN: 100-11) — 0.3 tpy
 - (12) Tank No. 100-14 (EPN: 100-14) — 2.3 tpy
 - (13) Tank No. 5-0 (EPN: 5-0) — 1.2 tpy
 - (14) Tank No. 120-22 (EPN: 120-22) — 0.8 tpy
 - (15) Tank No. 100-12 (EPN: 100-12) — 0.3 tpy
 - (16) Tank No. 120-25 (EPN: 120-25) — 3.5 tpy
 - (17) Tank No. 100-13 (EPN: 100-13) — 0.4 tpy
 - (18) Tank No. 120-23 (EPN: 120-23) — 0.8 tpy
 - (19) Tank No. 100-15 (EPN: 100-15) — 2.3 tpy
 - (20) Process Fugitive Components (EPN: FUG) — 9.9 tpy
 - (21) Marine Loading Fugitives (EPN: MAR-LOADFUG) — 8.7 tpy
 - (22) Marine Loading VCU (EPN: MAR-VCU) — 4.4 tpy
 - (23) Emergency Generator (EPN: EGEN-1) — 0.7 tpy
 - (24) MSS Activities (EPN: MSS) — 4.2 tpy
 - (25) Transfers between tanks authorized under Special Condition 20 — 6.1 tpy

The offset requirement associated with item (25) is adjusted to ensure that the total offset requirement equals 82.9 tpy VOC.

- B. This NNSR permit is issued on the condition that the permit holder obtain and provide 22.2 tpy of NO_x ERCs to offset the 17.09 tpy NO_x project emission increase for the facilities authorized by this permit at a ratio of 1.3 to 1, through participation in the TCEQ Emission Banking and Trading (EBT) Program.

The permit holder shall use 0.9 tpy NO_x ERCs from TCEQ ERCC No. 2771 in order to provide offsets at the ratio of 1.3 to 1 for 0.69 tpy of NO_x emissions authorized from Flare No. 101 (EPN FL 101).

The permit holder shall, prior to the commencement of operation, obtain approval from the TCEQ EBT Program for the ERCs being used and then submit a permit alteration or amendment request to the TCEQ Air Permits Division (and copy the TCEQ Regional Office) to identify approved credits by TCEQ ERCC number.

- C. In addition to using ERCs for NO_x, or in place of using ERCs for NO_x, the permit holder may utilize Mass Emission Cap and Trade (MECT) Program allowances to satisfy all, or a portion (with the balance of the offset requirement being obtained through the use of Emission Reduction Credit Certificates) of the NO_x offset requirement for facilities required to participate in the MECT Program. The permit holder shall, prior to the commencement of operation, obtain approval from the TCEQ Emission Banking and Trading Program for the use of MECT allowances. If this offset option is chosen, the permit holder shall comply with the following:

- (1) To satisfy the 1:1 portion of the 1.3:1 offset requirement for the project's increase of NO_x emissions from facilities subject to the MECT Program, the permit holder shall permanently set aside 16.2 tons per year (tpy) of MECT allowances prior to the start of operation of the following facilities. At the end of each control period, the full amount of allowances set aside to satisfy any part of the 1:1 portion will be deducted, regardless of whether the actual NO_x emissions from the following facilities are less than this amount.
 - (a) Naphtha Splitter Reboiler Train I (EPN: F-101) – 5.9 tpy
 - (b) Naphtha Splitter Reboiler Train II (EPN: F-201) – 5.9 tpy
 - (c) Marine Loading VCU Emissions Cap (EPN: MAR-VCU) – 2.6 tpy
 - (d) Emergency Generator (EPN: EGEN-1) – 1.6 tpy
 - (e) MSS Emissions from sources subject to MECT (EPN: MSS) – 0.2 tpy
- (2) To satisfy the 0.3 portion of the 1.3:1 offset requirement for the project's increase of NO_x emissions from facilities subject to the MECT program, the permit holder shall permanently transfer to the TCEQ 4.8 tpy of MECT allowances prior to the start of operation of the following facilities.
 - (a) Naphtha Splitter Reboiler Train I (EPN: F-101) – 1.8 tpy
 - (b) Naphtha Splitter Reboiler Train II (EPN: F-201) – 1.8 tpy
 - (c) Marine Loading VCU Emissions Cap (EPN: MAR-VCU) – 0.8 tpy

- (d) Emergency Generator (EPN: EGEN-1) – 0.3 tpy
- (e) MSS Emissions from sources subject to MECT (EPN: MSS) – 0.1 tpy

The offset requirement associated with item (d) is adjusted to ensure that the total offset requirement in paragraph (2) equals 4.8 tpy NO_x.

- (3) If MECT allowances set aside to satisfy the 1:1 portion of the 1.3:1 offset requirement devalue due to future regulatory changes, the permit holder shall acquire additional MECT allowances equivalent to the allowance devaluation to make up for the devaluation change. Allowances used to satisfy the 0.3:1 portion of the offset requirement will not devalue due to future regulatory changes. The TCEQ EBT Program shall verify the use of these allowances.
- (4) The permit holder may use MECT allowances to satisfy the 1.3:1 offset requirement for MSS Emissions from sources not subject to MECT (EPN: MSS). The permit holder shall permanently transfer to the TCEQ 0.3 tpy of MECT allowances to satisfy the offset requirement for the 0.24 tpy NO_x project emission increases for MSS emissions from sources not subject to MECT.

Maintenance, Startup, and Shutdown

- 33. This permit authorizes emissions from the following temporary facilities used to support the planned MSS activities identified in Special Condition 34 at permanent site facilities: frac tanks, vacuum trucks, portable control devices identified in Special Condition 43, and controlled recovery systems. Emissions from temporary facilities are authorized provided the temporary facility (a) does not remain on the plant site for more than 12 consecutive months, (b) is used solely to support planned MSS activities at the permanent site facilities authorized by this permit, and (c) does not operate as a replacement for an existing authorized facility.
- 34. This permit authorizes the emissions from the facilities authorized by this permit for the planned maintenance, startup, and shutdown (MSS) activities summarized in the table below.

Facility	Activity	EPN
Process Line	Shutdown, depressurize, and degas to flare. Vent to atmosphere.	MSS
Heater	Heater startup.	F-101, F-201
Storage Tanks	Drain, degas, and open tank.	MSS
Storage Tanks	Refill empty tank with landed roof.	MSS
Vessels and Piping	Empty and degas to control.	MSS
Piping	Degas to atmosphere.	MSS
Piping	Drain liquid.	MSS
Air movers and vacuum trucks	Remove liquid from storage tanks, piping, and other facilities for planned maintenance.	MSS

Facility	Activity	EPN
Frac tanks	Store liquid from tanks, piping, and other facilities undergoing planned MSS.	MSS
Minor facilities: pumps, valves, piping, filters, etc. with an isolated volume of less than 85 cubic feet	Isolate, drain, degas to atmosphere, and refill to support planned maintenance.	MSS

Maintenance activities associated with minor facilities: pumps, valves, piping, filters, etc. with an isolated volume of less than 85 cubic feet in the table above may be tracked through work orders or equivalent. Emissions from these activities identified shall be calculated using the number of work orders or equivalent that month and the emissions associated with that activity identified in the permit application.

The performance of and emissions associated with each planned MSS activity performed on the facilities identified as storage tanks, air movers, vacuum trucks, and frac tanks shall be documented in accordance with the applicable Special Condition(s).

The performance of each planned MSS activity associated with pressurized tanks and the facility identified as vessels and piping in the table above and the emissions associated with it shall be recorded and include at least the following information:

- A. the process equipment at which emissions from the MSS activity occurred, including the emission point number and common name of the process equipment;
- B. the type of planned MSS activity and the reason for the planned activity;
- C. the common name and the facility identification number, if applicable, of the facilities at which the MSS activity and emissions occurred;
- D. the date and time of the MSS activity and its duration;
- E. the estimated quantity of each air contaminant, or mixture of air contaminants, emitted with the data and methods used to determine it. The emissions shall be estimated using the methods identified in the permit application, consistent with good engineering practice.

All MSS emissions shall be summed monthly and the rolling 12-month emissions shall be updated on a monthly basis.

35. Permanent facilities, with the exception of atmospheric storage tanks, shall be depressurized, emptied, degassed, and placed in service in accordance with the following requirements.
 - A. Process equipment shall be depressurized to a control device or a controlled recovery system prior to venting to atmosphere, degassing, or draining liquid. Equipment that only contains material that is liquid with VOC partial pressure less than 0.50 psi at the normal process temperature and 95°F may be opened to atmosphere and

drained in accordance with paragraph C of this special condition. The vapor pressure at 95°F may be used if the actual temperature of the liquid is verified to be less than 95°F and the temperature is recorded.

- B. If mixed phase materials must be removed from process equipment, the cleared material shall be routed to a knockout drum or equivalent to allow for managed initial phase separation. If the VOC partial pressure is greater than 0.50 psi at either the normal process temperature or 95°F, any vents in the system must be routed to a control device or a controlled recovery system. The vapor pressure at 95°F may be used if the actual temperature of the liquid is verified to be less than 95°F and the temperature is recorded. Control must remain in place until degassing has been completed or the equipment is no longer vented to atmosphere.
- C. All liquids from process equipment must be removed to the maximum extent practical prior to opening equipment to commence degassing and/or maintenance. Liquids must be transferred into a storage tank authorized by this permit or a vessel meeting the requirements of Special Condition 41 unless prevented by the physical configuration of the equipment. If it is necessary to drain liquid into an open pan or sump, the liquid must be covered or transferred to a covered vessel within one hour of being drained.
- D. If the VOC partial pressure is greater than 0.50 psi at the normal process temperature or 95°F, facilities shall be degassed using good engineering practice to ensure air contaminants are removed from the system through the control device or controlled recovery system to the extent allowed by process equipment or storage vessel design. The vapor pressure at 95°F may be used if the actual temperature of the liquid is verified to be less than 95°F and the temperature is recorded. The facilities to be degassed shall not be vented directly to atmosphere, except as necessary to establish isolation of the work area or to monitor VOC concentration following controlled depressurization. The venting shall be minimized to the maximum extent practicable and actions taken recorded. The control device or recovery system utilized shall be recorded with the estimated emissions from controlled and uncontrolled degassing calculated using the methods that were used to determine allowable emissions for the permit application.
 - (1) For MSS activities that may be tracked through work orders, the following option may be used in lieu of (2) below. The facilities being prepared for maintenance shall not be vented directly to atmosphere until the VOC concentration has been verified to be less than 5 percent of the lower explosive limit (LEL) per documented site procedures used to de-inventory equipment to a control device for safety purposes (i.e., hot work or vessel entry procedures).
 - (2) The locations and/or identifiers where the purge gas or steam enters the process equipment and the exit points for the exhaust gases shall be recorded (process flow diagrams [PFDs] or piping and instrumentation diagrams [P&IDs] may be used to demonstrate compliance with the requirement). If the process equipment is purged with a gas, two system volumes of purge gas must have passed through the control device or controlled recovery system before the vent stream may be sampled to verify acceptable VOC concentration prior

to uncontrolled venting. The VOC sampling and analysis shall be performed using an instrument meeting the requirements of Special Condition 36. The sampling point shall be upstream of the inlet to the control device or controlled recovery system to determine whether VOC concentrations are acceptable for uncontrolled venting. The sample ports and the collection system must be designed and operated such that there is no air leakage into the sample probe or the collection system downstream of the process equipment or vessel being purged. If there is not a connection (such as a sample, vent, or drain valve) available from which a representative sample may be obtained, a sample may be taken upon entry into the system after degassing has been completed. The sample shall be taken from inside the vessel so as to minimize any air or dilution from the entry point. The facilities shall be degassed to a control device or controlled recovery system until the VOC concentration is less than 5,000 ppmv or 5 percent of the LEL, with the exception of the pressurized storage tanks which must be degassed to control until the VOC concentration is 2,000 ppmv or 2 percent of the LEL. Documented site procedures used to de-inventory equipment to a control device for safety purposes (i.e., hot work or vessel entry procedures) that achieve at least the same level of purging may be used in lieu of the above.

36. Air contaminant concentration shall be measured using an instrument/detector meeting one set of requirements specified below.
- A. VOC concentration shall be measured using an instrument meeting all the requirements specified in EPA Method 21 (40 CFR 60, Appendix A) with the following exceptions:
 - (1) The instrument shall be calibrated within 24 hours of use with a calibration gas such that the response factor (RF) of the VOC (or mixture of VOCs) to be monitored shall be less than 2.0. The calibration gas and the gas to be measured, and its approximate (RF) shall be recorded.
 - (2) Sampling shall be performed as directed by this permit in lieu of section 8.3 of Method 21. During sampling, data recording shall not begin until after two times the instrument response time. The date and time shall be recorded, and VOC concentration shall be monitored for at least 5 minutes, recording VOC concentration each minute. As an alternative the VOC concentration may be monitored over a five-minute period with an instrument designed to continuously measure concentration and record the highest concentration read. The highest measured VOC concentration shall be recorded and shall not exceed the specified VOC concentration limit prior to uncontrolled venting.
 - B. Colorimetric gas detector tubes may be used to determine air contaminant concentrations if they are used in accordance with the following requirements.
 - (1) The air contaminant concentration measured as defined in (3) is less than 80 percent of the range of the tube and is at least 20 percent of the maximum range of the tube.

- (2) The tube is used in accordance with the manufacturer's guidelines.
- (3) At least 2 samples taken at least 5 minutes apart must satisfy the following prior to uncontrolled venting:

measured contaminant concentration (ppmv) < release concentration.

Where the release concentration is:

5,000*mole fraction of the total air contaminants present that can be detected by the tube.

The mole fraction may be estimated based on process knowledge. The release concentration and basis for its determination shall be recorded.

Records shall be maintained of the tube type, range, measured concentrations, and time the samples were taken.

- C. Lower explosive limit measured with a lower explosive limit detector (5000 ppmv standard). If a LEL detector is used to verify compliance with this standard rather than a Method 21 instrument, it must read a LEL of 5 percent or lower.
 - (1) The detector shall be calibrated monthly with an appropriate certified gas standard at 10 percent of the lower explosive limit (LEL) for the appropriate gas. Records of the calibration date/time and calibration result (pass/fail) shall be maintained.
 - (2) A daily functionality test shall be performed on each detector using the same type of certified gas standard. The LEL monitor shall read no lower than 90 percent of the calibration gas certified value. Records, including the date/time and test results, shall be maintained.
 - (3) A certified methane gas standard equivalent to 10 percent of the LEL for the appropriate gas may be used for calibration and functionality tests provided that the LEL response is within 95 percent of that for the appropriate gas.
 - (4) Definitions
 - (a) An appropriate gas is one which when used for calibration of the detector, ensures that the response factor (RF) of the VOC (or mixture of VOCs) to be monitored is less than 1.2.
 - (b) The same type of certified gas standard is a standard consisting of the same gas as used for calibration, certified to be 10 percent of the LEL for that gas.
- D. Lower explosive limit measured with a lower explosive limit detector (2 percent LEL standard). If a LEL detector is used to verify compliance with this standard rather than a Method 21 instrument, it must read a LEL of 1 percent or lower.
 - (1) The detector shall be calibrated monthly with an appropriate certified gas standard with a concentration between 2 and 3 percent of the lower explosive limit (LEL) for the appropriate gas. Records of the calibration date/time and calibration result (pass/fail) shall be maintained.

- (2) A daily functionality test shall be performed on each detector using the same type of certified gas standard. The LEL monitor shall read no lower than 90% of the calibration gas certified value in ppmv. Records, including the date/time and test results, shall be maintained.
 - (3) A certified methane gas standard equivalent to 2 to 3 percent of the LEL for the appropriate gas may be used for calibration and functionality tests provided that the concentration response is within 95 percent of that for the appropriate gas.
 - (4) Definitions
 - (a) An appropriate gas is one which when used for calibration of the detector, ensures that the response factor (RF) of the VOC (or mixture of VOCs) to be monitored is less than 1.2.
 - (b) The same type of certified gas standard is a standard consisting of the same gas as used for calibration, certified to be the same concentration (between 2 and 3 percent of the LEL for that gas).
- 37. This permit authorizes MSS emissions (EPN MSS) from internal floating roof storage tanks during planned floating roof landings. Tank roof landings include all operations when the tank floating roof is on its supporting legs. The following requirements apply to tank roof landings.
 - A. If the tank is to be completely drained, the tank liquid level shall be continuously lowered after the tank floating roof initially lands on its supporting legs until the tank and tank sump have been drained to the maximum extent practicable without the use of a sump stripping pump or entering the tank. The sump shall be emptied within 4 hours unless the vapor space is routed to control.
 - B. If the VOC vapor pressure of the liquid being drained from the tank is greater than 0.50 psia, a vapor recovery system shall be connected to the vapor space under the landed tank roof and the vapor space vented to a control device meeting the requirements of Special Condition 43. The locations and identifiers of vents other than permanent roof fittings and seals, control device or controlled recovery system, and controlled exhaust stream shall be recorded. The vapor space shall be vented to the control device during the period from the floating roof is landed until the tank has been degassed per part D of this condition or the tank has been filled so that the landed roof is floating on liquid. The vapor recovery system collection rate shall always be greater than 100 cubic feet per minute when the tank is idle and two times the fill rate when the tank is being refilled. There shall be no other gas/vapor flow out of the vapor space under the floating roof when the vapor space is directed to the control device. This shall be demonstrated as follows:
 - (1) The concentration of organic vapor in the vapor space above the internal floating roof shall be sampled and verified not to exceed 30 percent of its LEL.
 - (2) This sampling shall be performed annually on a tank being filled and on an idle tank, or as requested by the TCEQ Regional Office. The sampling shall be

performed in the morning if the tank is idle or being filled, as applicable, during that period.

- (3) The vapor collection recovery system shall be maintained at the minimum vapor collection system pressure set point required prior to and during sampling.
 - (4) The tank sampled, sampling results, flow rates, date and time shall be recorded. Sampling may be waived if a tank roof is not landed in a calendar year.
- C. Tank roofs shall not be landed for more than 72 hours unless the tank has been completely drained and degassing commenced per part D of this condition.
- D. If necessary, tanks shall be degassed as follows:
 - (1) If the tank had not been emptied, degassed, and entered within the last 24 months, the permit holder shall open at least one entry into the tank to perform a visual inspection of the tank floor and sump to confirm that there is no standing liquid present and the drain dry tank is operating as designed. This inspection shall be performed during controlled degassing, if applicable. If any standing liquid is noted, it must be removed prior to uncontrolled tank degassing.
 - (2) If the VOC vapor pressure of the liquid stored in the tank is greater than 0.10 psia, the gas or vapor removed from the vapor space under the floating roof must be routed to a control device through a controlled recovery system and controlled degassing must be maintained until the VOC concentration is less than 5,000 ppmv or 5 percent of the LEL as measured per Special Condition 36. Degassing shall continue until the VOC concentration is less than 2,000 ppmv or 2 percent of the LEL if the tank will be opened or ventilated without control as allowed by part E of this condition. The locations and identifiers of vents other than permanent roof fittings and seals, control device or controlled recovery system, and controlled exhaust stream shall be recorded. There shall be no other gas/vapor flow out of the vapor space under the floating roof when degassing to the control device.
 - (3) The vapor space under the floating roof shall be vented using good engineering practice to ensure air contaminants are flushed out of the tank through the control device or controlled recovery system to the extent allowed by the storage tank design.
 - (4) The vent stream before the control device shall be sampled to determine whether VOC concentrations are acceptable for uncontrolled venting. The measurement of purge gas volume shall not include any make-up air introduced into the control device or recovery system. The VOC sampling and analysis shall be performed as specified in Special Condition 36.
 - (5) The sampling point shall be upstream of the inlet to the control device or controlled recovery system. The sample ports and the collection system must be designed and operated such that there is no air leakage into the sample

probe or the collection system downstream of the process equipment or vessel being purged.

- E. The tank may be opened without restriction and ventilated without control after all standing liquid has been removed from the tank and the vapor space VOC concentration is less than 2000 ppmv or 2 percent of the LEL or the liquid previously stored in the tank had a VOC vapor pressure less than or equal to 0.10 psia. A tank shall not be ventilated without control more than once in any rolling 12 month period and only one tank shall be ventilated without control at any time.
- F. The following requirements apply to filling tanks with landed roofs until the roof is off its legs (floating on the liquid).
 - (1) The vapor space under the landed floating roof shall be vented to control per part B of this condition prior to commencing the filling of an empty tank unless the tank is being filled with liquid with a VOC vapor pressure less than 0.50 psia and the tank has verified dry by visual inspection of the tank floor and sump.
 - (2) Tanks shall be refilled as rapidly as practicable.
- G. The occurrence of each roof landing and the associated emissions shall be recorded and the rolling 12-month tank roof landing emissions shall be updated on a monthly basis. These records shall include at least the following information:
 - (1) Identification of the tank and emission point number, liquid stored, and any control devices or recovery systems used to reduce emissions;
 - (2) reason for the tank roof landing;
 - (3) date, time, and the other information specified below for each of the following events:
 - (a) the roof was initially landed,
 - (b) volume in the tank when liquid withdrawal stopped or when the tank and sump were fully drained,
 - (c) vapor space volume under the floating roof vented to control device and ventilation flow rate to the control device,
 - (d) start and completion of controlled degassing, total volumetric flow, results of any tank inspection of the tank for liquid and any corrective actions taken, VOC concentration sampling results;
 - (e) all standing liquid was removed from the tank,
 - (f) tank refilling commenced, liquid filling the tank, and the volume necessary to float the roof; and
 - (g) tank roof off supporting legs and floating on liquid;
 - (4) the estimated quantity of each air contaminant, or mixture of air contaminants, emitted while the roof was landed with the data and methods used to determine it. The emissions associated with roof landing activities shall be

calculated using the methods described in Section 7.1.3.2 of AP-42
“Compilation of Air Pollution Emission Factors, Chapter 7 - Storage of Organic Liquids” dated November 2006 and the permit application.

38. Reserved.
39. All permanent facilities must comply with all operating requirements, limits, and representations this permit during planned startup and shutdown unless alternate requirements and limits are identified in this permit. Alternate requirements for NO_x and CO emissions from the heaters during planned startup and shutdown are 0.025 lb/MMBtu and 100 ppmv corrected to 3 percent oxygen, respectively, if the startup period does not exceed 8 hours in duration and the time it takes to complete the shutdown does not exceed 4 hours.
40. The following requirements apply to vacuum and air mover truck operations to support planned MSS at this site:
 - A. Prior to initial use, identify any liquid in the truck. Record the liquid level and document the VOC partial pressure. After each liquid transfer, identify the liquid, the volume transferred, and its VOC partial pressure.
 - B. The vacuum/blower exhaust shall be routed to a control device and the fill line intake equipped with a “duckbill” or equivalent attachment if the hose end cannot be submerged in the liquid being collected.
 - C. A daily record containing the information identified below is required for each vacuum truck in operation at the site each day.
 - (1) For each liquid transfer made with the vacuum operating, record the duration of any periods when air may have been entrained with the liquid transfer. The reason for operating in this manner and whether a “duckbill” or equivalent was used shall be recorded. Short, incidental periods, such as those necessary to walk from the truck to the fill line intake, do not need to be documented.
 - (2) If the vacuum truck exhaust is controlled with a control device other than an engine or oxidizer, VOC exhaust concentration upon commencing each transfer, at the end of each transfer, and at least every hour during each transfer shall be recorded, measured using an instrument meeting the requirements of Special Condition 36.A or B.
 - D. Record the volume in the vacuum truck at the end of the day, or the volume unloaded, as applicable.
 - E. The permit holder shall determine the vacuum truck emissions each month using the daily vacuum truck records and the calculation methods utilized in the permit application. If records of the volume of liquid transferred for each pick-up are not maintained, the emissions shall be determined using the physical properties of the liquid vacuumed with the greatest potential emissions. Rolling 12 month vacuum truck emissions shall also be determined on a monthly basis.

41. The following requirements apply to frac, or temporary, tanks and vessels used in support of MSS activities.
 - A. The exterior surfaces of these tanks/vessels that are exposed to the sun shall be white or aluminum. This requirement does not apply to tanks/vessels that only vent to atmosphere when being filled, sampled, gauged, or when removing material.
 - B. These tanks/vessels must be covered and equipped with fill pipes that discharge within 6 inches of the tank/vessel bottom. The tank vapor space shall be vented to a control device meeting the requirements of Special Condition 43.
 - C. These requirements do not apply to vessels storing less than 450 gallons of liquid that are closed such that the vessel does not vent to atmosphere except when filling, sampling, gauging, or when removing material.
 - D. The permit holder shall maintain an emissions record which includes calculated emissions of VOC from all frac tanks during the previous calendar month and the past consecutive 12 month period. This record must be updated by the last day of the month following. The record shall include tank identification number, dates put into and removed from service, control method used, tank capacity and volume of liquid stored in gallons, name of the material stored, VOC molecular weight, and VOC partial pressure at the estimated monthly average material temperature in psia. Filling emissions for tanks shall be calculated using the TCEQ publication titled "Technical Guidance Package for Chemical Sources - Loading Operations" and standing emissions determined using: the TCEQ publication titled "Technical Guidance Package for Chemical Sources — Storage Tanks."
42. Additional occurrences of MSS activities authorized by this permit may be authorized under permit by rule only if conducted in compliance with this permit's procedures, emission controls, monitoring, and recordkeeping requirements applicable to the activity. Total VOC planned MSS emissions associated with the facilities authorized by this permit shall not exceed the quantity shown in the MAERT for EPN MSS.
43. Control devices required by this permit for emissions from planned MSS activities are limited to those types identified in this condition. Control devices shall be operated with no visible emissions except periods not to exceed a total of five minutes during any two consecutive hours. Each device used must meet all the requirements identified for that type of control device. Storage tank emissions shall be controlled by a VCU or thermal oxidizer meeting the requirements of part B of this condition.

Controlled recovery systems identified in this permit shall be directed to an operating process or to a collection system that is vented through a control device meeting the requirements of this permit condition.

- A. Carbon Adsorption System (CAS).
 - (1) The CAS shall consist of 2 carbon canisters in series with adequate carbon supply for the emission control operation.

- (2) The CAS shall be sampled downstream of the first canister and the concentration recorded at least once every hour of CAS run time to determine breakthrough of the VOC. The sampling frequency may be extended using either of the following methods:
 - (a) It may be extended to up to 30 percent of the minimum potential saturation time for a new canister of carbon. The permit holder shall maintain records including the calculations performed to determine the minimum saturation time.
 - (b) The carbon sampling frequency may be extended to longer periods based on previous experience with carbon control of a MSS waste gas stream. The past experience must be with the same VOC, type of facility, and MSS activity. The basis for the sampling frequency shall be recorded. If the VOC concentration on the initial sample downstream of the first carbon canister following a new polishing canister being put in place is greater than 100 ppmv above background, it shall be assumed that breakthrough occurred while that canister functioned as the final polishing canister and a permit deviation shall be recorded.
 - (3) The method of VOC sampling and analysis shall be by detector meeting the requirements of Special Condition 36.A or B.
 - (4) Breakthrough is defined as the highest measured VOC concentration at or exceeding 100 ppmv above background. When the condition of breakthrough of VOC from the initial saturation canister occurs, the waste gas flow shall be switched to the second canister and a fresh canister shall be placed as the new final polishing canister within four hours. Sufficient new activated carbon canisters shall be maintained at the site to replace spent carbon canisters such that replacements can be done in the above specified time frame.
 - (5) Records of CAS monitoring shall include the following:
 - (a) Sample time and date.
 - (b) Monitoring results (ppmv).
 - (c) Canister replacement log.
 - (6) Single canister systems are allowed if the time the carbon canister is in service is limited to no more than 30 percent of the minimum potential saturation time. The permit holder shall maintain records for these systems, including the calculations performed to determine the saturation time. The time limit on carbon canister service shall be recorded and the expiration date attached to the carbon can.
- B. Thermal Oxidizer/Vapor Combustor.
- (1) If controlling storage tank emissions, the thermal oxidizer/vapor combustion unit shall provide no less than 99.8 percent DRE control of the waste gas directed to it, or allow a VOC exit stream concentration of no greater than 10 ppmv, dry corrected to 3 percent oxygen. This shall be demonstrated per by

having completed a control efficiency demonstration (stack test) in accordance with the approved test methods in 30 TAC 115.545 (relating to Approved Test Methods) within the past 12 months and maintaining thermal oxidizer/vapor combustor firebox exit temperature at not less than that temperature maintained during the demonstration with waste gas flow limited to that maintained during the demonstration while waste gas is being fed into the oxidizer/combustor..

- (2) If controlling MSS emissions from facilities other than atmospheric storage tanks, the thermal oxidizer/vapor combustion unit shall provide no less than 99.5 percent DRE control of the waste gas directed to it, or allow a VOC exit stream concentration of no greater than 10 ppmv, dry corrected to 3 percent oxygen. This may be demonstrated by:
 - (a) maintaining thermal oxidizer/vapor combustor firebox exit temperature at not less than 1400°F with waste gas flows shall be limited to assure at least a 0.5 second residence time in the fire box while waste gas is being fed into the oxidizer/combustor; or
 - (b) having completed a control efficiency demonstration (stack test) in accordance with the approved test methods in 30 TAC 115.545 (relating to Approved Test Methods) within the past 12 months and maintaining thermal oxidizer/vapor combustor firebox exit temperature at not less than that temperature maintained during the demonstration with waste gas flow limited to that maintained during the demonstration while waste gas is being fed into the oxidizer/combustor.

The thermal oxidizer/vapor combustor exhaust temperature shall be continuously monitored and recorded when waste gas is directed to the oxidizer/combustor. The temperature measurements shall be made at intervals of six minutes or less and recorded at that frequency.

The temperature measurement device shall be installed, calibrated, and maintained according to accepted practice and the manufacturer's specifications. The device shall have an accuracy of the greater of ± 0.75 percent of the temperature being measured expressed in degrees Fahrenheit or $\pm 4.5^\circ\text{F}$.

C. Internal Combustion Engine.

- (1) The internal combustion engine shall have a VOC destruction efficiency of at least 99.5 percent.
- (2) The engine must have been stack tested with butane or propane to confirm the required destruction efficiency within the period specified in item (3) below. VOC shall be measured in accordance with the applicable United States Environmental Protection Agency (EPA) Reference Method during the stack test and the exhaust flow rate may be determined from measured fuel flow rate and measured oxygen concentration. A copy of the stack test report shall be maintained with the engine. There shall also be documentation of acceptable VOC emissions following each occurrence of engine maintenance that may

reasonably be expected to increase emissions including oxygen sensor replacement and catalyst cleaning or replacement. Stain tube indicators specifically designed to measure VOC concentration shall be acceptable for this documentation, provided a hot air probe or equivalent device is used to prevent error due to high stack temperature, and three sets of concentration measurements are made and averaged. Portable VOC analyzers meeting the requirements of Special Condition 36.A are also acceptable for this documentation.

(3) The engine shall be operated and monitored as specified below.

- (a) If the engine is operated with an oxygen sensor-based air-to-fuel ratio (AFR) controller, documentation for each AFR controller that the manufacturer's or supplier's recommended maintenance has been performed, including replacement of the oxygen sensor as necessary for oxygen sensor-based controllers shall be maintained with the engine. The oxygen sensor shall be replaced at least quarterly in the absence of a specific written recommendation. The engine must have been stack tested within the past 12 months in accordance with item (2) of this condition.

The test period may be extended to 24 months if the engine exhaust is sampled once an hour when waste gas is directed to the engine using a detector meeting the requirements of Special Condition 36.A. The sample ports and the collection system must be designed and operated such that there is no air leakage into the sample probe or the collection system downstream of the engine. The concentrations shall be recorded and the MSS activity shall be stopped as soon as possible if the VOC concentration exceeds 100 ppmv above background.

- (b) If an oxygen sensor-based AFR controller is not used, the engine exhaust to atmosphere shall be monitored continuously and the VOC concentration recorded at least once every 15 minutes when waste gas is directed to the engine. The sample ports and the collection system must be designed and operated such that there is no air leakage into the sample probe or the collection system downstream of the engine. The method of VOC sampling and analysis shall be by detector meeting the requirements of Special Condition 36.A. An alarm shall be installed such that an operator is alerted when outlet VOC concentration exceeds 100 ppmv above background. The MSS activity shall be stopped as soon as possible if the VOC concentration exceeds 100 ppmv above background for more than one minute. The date and time of all alarms and the actions taken shall be recorded. The engine must have been stack tested within the past 24 months in accordance with part (2) of this condition.

- D. The flare (EPN FL-101) shall be used to control the emissions from process train shutdowns. After the process train has been depressurized to the flare, the permit holder shall install and operate continuous flow monitors that provide a record of the exhaust vent stream and natural gas flows to the flare. The flow monitor sensor and

analyzer sample points shall be installed in the vent stream as near as possible to the flare inlet such that the total vent stream to the flare is measured and analyzed. Readings shall be taken at least once every 15 minutes and the average hourly values of the flow shall be recorded each hour. The monitors shall be calibrated on an annual basis to meet the following accuracy specifications: the flow monitor shall be $\pm 5.0\%$, temperature monitor shall be $\pm 2.0\%$ at absolute temperature, and pressure monitor shall be ± 5.0 mm Hg. The exhaust vent gas from the process shall be assumed to have no net heating value so that the natural gas flow shall provide for sufficient heating value at the flare tip.

Date: October 8, 2014

Emission Sources - Maximum Allowable Emission Rates

Permit Number 101199 and N158

This table lists the maximum allowable emission rates and all sources of air contaminants on the applicant's property covered by this permit. The emission rates shown are those derived from information submitted as part of the application for permit and are the maximum rates allowed for these facilities, sources, and related activities. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

Air Contaminants Data

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
F-101	Naphtha Splitter Reboiler Train I	CO	9.13	—
		CO (6)	14.78	—
		NO _x	2.47	—
		NO _x (6)	5.00	—
		VOC	1.33	—
		SO ₂	1.48	—
		PM	1.11	—
		PM ₁₀	1.11	—
		PM _{2.5}	1.11	—
		Ammonia	1.83	—
F-201	Naphtha Splitter Reboiler Train II	CO	9.13	—
		CO (6)	14.78	—
		NO _x	2.47	—
		NO _x (6)	5.00	—
		VOC	1.33	—
		SO ₂	1.48	—
		PM	1.11	—
		PM ₁₀	1.11	—
		PM _{2.5}	1.11	—
		Ammonia	1.83	—

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
F-101 F-201	Heater Annual Emission Cap	CO	—	72.84
		NO _x	—	11.83
		VOC	—	10.63
		SO ₂	—	11.83
		PM	—	8.87
		PM ₁₀	—	8.87
		PM _{2.5}	—	8.87
		Ammonia	—	14.57
FL-101	Flare No. 101	CO	0.63	2.75
		NO _x	0.16	0.69
		VOC	0.03	0.12
		SO ₂	0.00	0.00
200-1	Tank No. 200-1	VOC	2.27	4.59
200-2	Tank No. 200-2	VOC	2.27	4.59
200-3	Tank No. 200-3	VOC	2.27	4.59
100-20	Tank No. 100-20	VOC	0.80	0.20
150-10	Tank No. 150-10	VOC	0.78	0.68
120-24	Tank No. 120-24	VOC	1.24	2.67
100-21	Tank No. 100-21	VOC	0.88	0.20
100-11	Tank No. 100-11	VOC	0.88	0.20
100-14	Tank No. 100-14	VOC	1.22	1.79
5-0	Tank No. 5-0	VOC	1.30	0.90
120-22	Tank No. 120-22	VOC	0.91	0.59
100-12	Tank No. 100-12	VOC	0.88	0.20

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
120-25	Tank No. 120-25	VOC	1.24	2.67
100-13	Tank No. 100-13	VOC	1.22	0.32
120-23	Tank No. 120-23	VOC	0.91	0.59
100-15	Tank No. 100-15	VOC	1.22	1.79
FUG	Process Fugitive Components (5)	VOC	1.74	7.60
MAR-LOADFUG	Marine Loading Fugitives Emissions Cap	VOC	141.96	6.70
MAR-VCU	Marine Loading VCU Emission Caps	CO	6.91	3.40
		NO _x	5.18	2.55
		VOC	8.59	3.39
		SO ₂	0.05	0.03
		PM	0.64	0.32
		PM ₁₀	0.64	0.32
		PM _{2.5}	0.64	0.32
EGEN-1	Emergency Generator	CO	12.90	3.22
		NO _x	6.23	1.56
		VOC	2.02	0.50
		SO ₂	5.79	1.45
		PM	0.37	0.09
		PM ₁₀	0.37	0.09
		PM _{2.5}	0.37	0.09

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
MSS	MSS Activities	VOC	382.50	3.25
		NO _x	37.20	0.46
		CO	131.39	1.35
		SO ₂	2.42	0.01
		PM	2.23	0.08
		PM ₁₀	2.23	0.08
		PM _{2.5}	2.23	0.08
All	All authorized by permit	Benzene	—	0.30

- (1) Emission point identification - either specific equipment designation or emission point number from plot plan.
- (2) Specific point source name. For fugitive sources, use area name or fugitive source name.
- (3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
 NO_x - total oxides of nitrogen
 SO₂ - sulfur dioxide
 PM - total particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}, as represented
 PM₁₀ - total particulate matter equal to or less than 10 microns in diameter, including PM_{2.5}, as represented
 PM_{2.5} - particulate matter equal to or less than 2.5 microns in diameter
 CO - carbon monoxide
- (4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
- (5) Process component fugitive emissions and marine loading fugitive emissions from leak checked vessels are estimates and are enforceable through compliance with the applicable special condition(s) and permit application representations.
- (6) Rates apply to planned startup periods as specified in Special Condition 34.

Date: October 8, 2014